AUSTRALIAN CURRICULUM, ASSESSMENT AND REPORTING AUTHORITY

Foundation to Year 10 Achievement Standards

for English, mathematics, science and history

VALIDATION REPORT



13 September 2011

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1. Executive Summary

1.1 Validation report

ACARA's Foundation to Year 10 Achievement Standards Validation Report includes:

- a. the key findings from multiple sources of data including national workshops of teachers, state and territory workshops of teachers, external audits by the Australian National Assessment Program Literacy and Numeracy (NAPLAN) assessment team and by the Australian Council of Educational Research
- b. the actions taken to revise the F-10 achievement standards in response to these findings and further state and territory authority interrogation
- c. the results of further validation of the revised standards at a national teacher workshop
- d. the final set of revised achievement standards and the implications for refinement of content.

1.2 Validation focus and activities

Chapters Two and Three of the Report outline the major focus of validation and the key activities undertaken during that time.

In December 2010, Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) determined that "the next stage towards achieving substantial implementation of the Australian Curriculum by 2013 will include establishing a national common approach to the achievement standards across all states and territories, and trialling and validating that approach."

Advice provided to the Ministerial Council was that the validation of the achievement standards would seek to confirm their coherence, progression, consistency of expectation and usability by teachers.

Building on this and taking account of feedback from state and territories, as well as considering the available timeframe for validation in 2011, the validation process focused on the extent to which:

- a. the achievement standards in a learning area represented a coherent hierarchy of increasing complexity, in terms of understanding and skills (sequence)
- b. the achievement standard for each year was appropriately aligned with the content for that year (pitch, coherence)
- c. the achievement standards were seen by classroom teachers as facilitating planning for and assessing (formative and summative) student learning (usability).

The validation activities involved:

- a. testing how consistently classroom teachers interpreted and applied the standards
- b. evaluating the extent to which the achievement standards assisted classroom teachers to plan for and assess student learning
- c. rating the level of alignment between standardised assessments and the achievement standards
- d. evaluating the coherence of the achievement standards within and across learning areas (in terms of clarity and pitch; consistency of concepts, language, cognitive demand; and consistency between standards and content).

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1.3 Validation feedback and responses to feedback

Chapters Four and Five of the Report outline the feedback received from the national and state/territory validation activities and the key actions taken to revise the standards. In summary for each learning area, the following were the key issues and actions taken.

English F-10 achievement standards

lssu	les	Fo	cus for revision
1.	The order of the sentences in the achievement standards was not consistent	•	Reviewed the order of the sentences in the achievement standards and applied a consistent structure F-10
2.	Critical differences between some year levels were not obvious, particularly Years 4-9 in speaking and writing and Years 8-10 in listening, reading and viewing	•	Revised all of the achievement standards to ensure progression was evident across all levels Mapped achievement standards against curriculum content to ensure alignment and comprehensiveness
3.	Some terms used were ambiguous; sentence structures were sometimes too complex and could be simplified	•	Rewrote sentences, removing ambiguous terms, and simplified sentence structures to contain mostly one idea
4.	There were inconsistencies in the level of detail included in the achievement standards	•	Maintained consistency by keeping the statements broad rather than narrow
5.	Some feedback indicated that the standards should be presented by the language modes. In responding to this feedback, issues of inclusivity and equity were raised	•	Developed an alternative view of the achievement standards by language mode; included explicit statements for listening and speaking for every year level in receptive and productive view Terms such as 'listen', 'speak', 'read', 'view' and 'write' included in the glossary to ensure inclusivity in their definition
6.	Greater emphasis to varying degrees on multimodal texts, spelling, editing, visual elements and handwriting	•	The term 'texts' defined in the English glossary, including multimodal texts; spelling included from F-10; editing included from 3-10; visual elements included from F-10; handwriting included from F-3

Mathematics F-10 achievement standards

lssu	les	Fo	cus for revision
1.	The progression of measurement was not as clearly stated as the other strands	•	Revised achievement standards to include a measurement concept in each understanding and skill at each year level
2.	The structure of the achievement standards with skills and understanding paragraphs sometimes clouded the development of the concepts	•	Revised the placement of understanding and skills to align consistently with the definitions of understanding and skills; and evaluated the use of verbs to ensure consistent application
3.	There were some concepts evident in the content descriptions that were not evident in the achievement standards	•	Revised achievement standards to include those key concepts that were evident in the content
4.	There were not enough 'proficiency' words used in the achievement standards	•	Mapped the proficiency year level statements to the achievement standards to ensure the appropriate inclusion of the proficiencies
5.	There was not necessarily alignment of the content strands and the achievement standards	•	Cross-checked the achievement standards against the content descriptions to see the progression and development of the concepts and revised as appropriate
6.	There was no evidence of digital technologies in the achievement standards	•	It is assumed that students will be taught mathematics with an extensive range of technological applications and techniques. The phrase 'efficient strategies' will be added to the glossary to include statements about the use of digital technologies

Science F-10 achievement standards

lssu	es	Fo	cus for revision
1.	The sequence of achievement standards for science understanding was unclear across Years 4-8	•	Mapped the sub-strands and key concepts and revised achievement standards for science understanding as appropriate
2.	There was preference for a more consistent level of specificity with regard to content/big ideas in science understanding	•	Reviewed the key concepts in each of the Science Understanding sub-strands; where conceptually appropriate, reviewed achievement standard statements to echo the language of the key concept
3.	The Science as a Human Endeavour strand was seen as under-represented in the achievement standards	•	Ensured each sub-strand of Science as a Human Endeavour was addressed for each year level through statements that reflect either part or all of the content description
4.	The Science Inquiry Skills were seen to be haphazardly distributed across the year levels, although all skills were addressed over the two year bands	•	Considered each band of year levels and ensured each Science Inquiry Skills sub-strand was represented in each year level, and all content descriptions were represented over the two years
5.	Earth Sciences concepts were seen as under-represented in the standards	•	Provided a map that shows how each achievement standard reflects the Earth and space sciences sub-strand and filled in the gaps as required

History F-10 achievement standards

Issues 1. Lack of discernible progression in understanding at Years 8-9 in particular (and Years 6-7 and Years 1-3 for some); and in skills mainly across Years 6-10		Fo	cus for revision
1.	understanding at Years 8-9 in particular (and Years 6-7 and Years 1-3 for some); and in	•	Audited the skills and understandings currently represented at each year level; adjusted language to provide greater clarity; and moved some misplaced statements from 'understanding' to 'skills' Used verb combinations and other strategies to describe greater complexity, and placed a 'skill' in a context using a specific stem to describe a greater complexity in application
2.	Lack of clarity about what is an 'understanding' and what is a 'skill'	•	Moved particular statements from 'understanding' to 'skills' where they had been misplaced; and strengthened the understandings described through statements that explicate the key concept
3.	Lack of structural alignment (in the order/pattern of statements within a standard from one year level to another)	•	Identified existing threads in particular conceptual understandings and skills, and strengthened the order/pattern within 'skills' to better reflect the sub-strands
4.	Some examples of imprecise and inconsistent use of language	•	Removed inconsistencies in language for which there is no clear justification; certain key terms added to the glossary to clarify the meaning of language used in the standard
5.	Lack of clarity about expected learning in the F-2 achievement standards	•	Removed as appropriate verbs and adjectives that lack meaning Strengthened as appropriate the use of higher order thinking

1.4 Conclusions

At the second national validation workshop on 29 August 2011, there was final confirmation by teacher and curriculum expert representatives that the revised achievement standards, with some final refinements, were ready for publication.

This workshop was a culmination of activity described in this Report throughout July and August to provide feedback that informed the revision to the achievement standards. This activity included:

- A national validation workshop of teachers and curriculum experts on 16-17 June
- State and territory workshops during July and early August
- ACARA's Assessment Group review of Mathematics and English Using the National Assessment Program Literacy and Numeracy (NAPLAN) Scales

- ACER's systematic linguistic and cognitive audit of the Australian Curriculum: English, mathematics, science and history achievement standards
- Meetings with state and territory education authorities on initial draft revised acheivement standards
- A second national validation workshop of teachers and curriculum experts on 29 August 2011.

2. Background

2.1 Position taken to 2010 Ministerial Council re validation and Ministerial Council decision

In December 2010, MCEECDYA determined that "the next stage towards achieving substantial implementation of the Australian Curriculum by 2013 will include establishing a national common approach to the achievement standards across all states and territories, and trialling and validating that approach."

Advice provided to the Ministerial Council was that the validation of the achievement standards would seek to confirm their coherence, developmental progression, consistency of expectation and usability by teachers.

Building on this and taking account of feedback from state and territories, as well as considering the available timeframe for validation in 2011, the validation process focused on the extent to which:

- the achievement standards in a learning area represent a coherent hierarchy of increasing complexity, in terms of understanding and skills (sequence)
- the achievement standard for each year is appropriately aligned with the content for that year (pitch, coherence)
- the achievement standards are seen by classroom teachers as facilitating planning for and assessing (formative and summative) student learning (usability).

ACARA's approach to the validation of the Foundation to Year 10 Australian Curriculum achievement standards took into account feedback ACARA sought and received in December 2010 on validation processes from ACER, Professor Patrick Griffin and Professor David Andrich.

2.2 Key actions taken since December 2010 to finalise and then implement the validation process, including advice from 'experts'

Feedback from consultation on the draft Phase 1 F-10 Australian Curriculum, together with advice from key stakeholders, identified some key matters that needed to be addressed in relation to the F-10 achievement standards, including consideration of a consistent approach to organising and presenting achievement standards across learning areas.

During Term 1 2011, ACARA commenced revision of the F-10 achievement standards in accordance with the position which was agreed at national assessment and reporting meetings between August 2010 and March 2011, including:

- applying a consistent structure to the F-10 achievement standards for learning areas other than English and mathematics by two key dimensions of learning, namely understanding and skills
- for English, organising achievement standards additionally by the receptive and productive modes
- for mathematics, organising the achievement standards additionally by the three strands (that is, by Number and Algebra, Measurement and Geometry, and Statistics and Probability).

The revised F-10 achievement standards were tested out with states and territories in meetings over 9-10 May 2011 and were considered more fully by state and territory representatives prior to validation by teachers at the 26 May 2011 national validation workshop convened by ACARA.

The Curriculum Committee noted at its 13 April 2011 meeting that the proposed validation process and associated activities were appropriate for finalising the Australian Curriculum (validated achievement standards and refined content where necessary) for approval by Ministers in October 2011. However, the Committee agreed that ACARA's communication activities should emphasise that the validation process be viewed as part of a longer-term process of continuing monitoring and empirical research and development beyond October 2011.

Teleconferences with state and territory, National Catholic Education Commission (NCEC), Independent Schools Council of Australia (ISCA) and Department of Education, Employment and Workplace Relations (DEEWR) representatives to review the proposed strategy were held on 9 and 10 May 2011. While particular issues were raised, there was support for the proposed process and associated activities, although it was noted that the scope of the activities and the timelines were ambitious. **(Appendix 1)**

The validation process in 2011 is part of a longer term empirical process which will take place during implementation to monitor and evaluate the Australian Curriculum. During this time, teachers will be teaching the content, planning for and assessing student learning, collecting evidence of student achievement and moderating their judgments in relation to the achievement standards.

As part of this process, ACARA will build the collection of annotated work samples that accompany the Australian Curriculum. This will involve collecting and annotating work samples that will support teachers in judging the quality of student learning in relation to each achievement standard in the Australian Curriculum.

The proposed validation process and timeline for the validation activity was approved by the Board at its 31 May 2011 meeting and endorsed by Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee (AEEYSOC) at its 10 June 2011 meeting.

ACARA conducted a national workshop of curriculum and assessment experts who could coordinate and oversee state/territory validation activity on Thursday 26 May 2011 to:

- explain and model the validation methodology and activities
- further refine the key research questions, instruments and support documentation for use in subsequent activities
- confirm dates for state and territory validation activities.

On 16-17 June 2011, ACARA conducted four national workshops each for English, mathematics, science and history with teachers and curriculum experts from each state and territory. The workshops involved the five activities outlined in section three of this document and aimed to test how consistently classroom teachers interpreted the achievement standards and how consistently they could apply the standards.

ACARA analysed the workshop data and responded to it by beginning the revision of the achievement standards. Feedback data from the state and territory workshops collated during July 2011 contributed to the ongoing revision of the achievement standards.

During August 2011, the validation data and revised achievement standards underwent final review and validation by state and territory authorities and by the classroom teachers who participated in 16-17 June 2011 workshops. They were then presented to the ACARA Board (9 September 2011), AEEYSOC (30 September 2011) and the Standing Council on School Education and Early Childhood (SCSEEC) 14 October 2011).

3. Foundation to Year 10 Validation Process

3.1 Validation focus

Building on advice provided to the Ministerial Council in December 2010 and taking account of feedback specified above, as well as considering the available timeframe for validation in 2011, the validation process focused on the extent to which:

- the achievement standards in a learning area represented a coherent hierarchy of increasing complexity, in terms of understanding and skills
- the achievement standard for each year was appropriately aligned with the content for that year
- the achievement standards were seen by classroom teachers as facilitating planning for and assessing (formative and summative) student learning.

The process timeline (See Appendix 1) involved activities to:

- a) test how consistently classroom teachers interpreted and applied the standards
- b) evaluate the extent to which the achievement standards assisted classroom teachers to plan for and assess student learning
- c) rate the level of alignment between standardised assessments and the achievement standards
- d) evaluate coherence of the achievement standards within and across learning areas.

All the data collected from these activities has contributed to this final report.

3.2 Validation activities

Activity A

Activity A tested how consistently classroom teachers interpreted and applied the standards, and the extent to which classroom teachers perceived the achievement standards would assist them to plan for and assess student learning. It involved central coordination by ACARA as well as state and territory activity with teachers.

Part (I)

ACARA invited each state and territory to nominate four curriculum experts across jurisdictions to attend a planning workshop in June 2011 where:

- the methodology was explained and the activities modelled
- key research questions, instruments and support documentation was used and refined
- assessment tasks and work samples were shared
- their plans for June/July were shared.

One or more of the state/territory participants were asked to coordinate and oversee the work in their local context. The refined program and materials from this workshop were used in Part (II) of the central program and then by jurisdictions with their teachers back in their state/territory.

Part (II)

A group of 24 teachers (each state nominated two teachers from primary (F-2, 3-6) and one from secondary (7-10) for each learning area and 8 curriculum experts per learning area (a curriculum expert from each state and territory) were brought together in early June and undertook the following activities:

- Correctly ordering the achievement standards. Teachers in each learning area (in groups) sequenced the achievement standards across F-10 (by reconstructing from F-10 the achievement standards that had been 'cut up' into smaller components)
- 2. Matching content descriptions with the achievement standards. Teachers (in learning area groups) evaluated the degree of alignment of each achievement standard to the corresponding curriculum content (skills and understanding) by undertaking a matrix mapping analysis
- Matching given assessment tasks to achievement standards. Teachers (in learning area groups) matched assessment tasks to the sequence of achievement standards F-10, judging that particular assessment tasks best aligned with (or were designed to provide evidence of) aspects of a particular achievement standard
- 4. Matching given work samples to the sequence of achievement standards F-10, judging that particular samples of work best aligned with the description of a particular achievement standard. Teachers also ranked student performance for each work sample (for example, low, medium and high quality) in relation to the relevant achievement standard and justified their judgements
- 5. Completing a self-reflective questionnaire at the end of the day (see Appendix 3). The questionnaire was completed individually and in stage of schooling learning area groups.

Part (III)

ACARA invited each state and territory jurisdiction to coordinate a similar program of activity with teachers (or groups of schools) in their state or territory and then identify on a matrix appropriate coverage of schools for this activity.

The program for the participating groups of teachers/schools typically included activities 1 - 5 above. State and territory jurisdictions then provided their data to ACARA between late July and early August 2011.

Activity B

ACARA conducted activity to estimate the alignment between the English, mathematics and science achievement standards, and the NAPLAN. The purpose is to substantiate the developmental progressions underpinning the Australian Curriculum achievement standards through the use of the established NAPLAN scales.

The process involved two stages:

Stage 1

An internal analysis of data was conducted to locate the achievement standards on the NAPLAN scales and to thereby validate the pitch and sequencing of the achievement standards.

Stage 2

The analysis process was replicated with a team of expert raters using a subset of NAPLAN items. The data was then analysed to identify the extent to which raters agreed (or disagreed) on the interpretations of the achievement standards, therefore validating the patterns observed in Stage 1.

Established in 2008, the (NAPLAN) is an annual population assessment administered to students in years 3, 5, 7 and 9. NAPLAN currently assesses five domains: Numeracy, Reading, Spelling, Language Conventions (Grammar and Punctuation) and Writing. Results in each of these five domains are analysed against a separate measurement scale, based on the Rasch Measurement Model. Using this scale, students' abilities and item locations can be reported as NAPLAN scale scores.

This research was designed to answer the primary research question:

To what extent do the achievement standards and content descriptions in the Australian Curriculum mathematics and English align with the NAPLAN scale used to measure item difficulty and student ability?

All items from the 2008, 2009 and 2010 NAPLAN tests were first matched to Australian Curriculum English and mathematics content descriptions and, where possible, achievement standards. Since each NAPLAN item has a known difficulty (location) on a NAPLAN measurement scale, it was proposed to align the curriculum content descriptions and (where possible) achievement standards to the underlying NAPLAN scales using the locations of NAPLAN items. In essence, the mapping exercise generated a de-facto measurement scale underpinning some aspects of the English and mathematics curricula.

Activity C

ACER was commissioned to undertake a systematic linguistic audit of the achievement standards to reveal the extent to which the language, syntax and sequencing of ideas are consistent within and across learning areas. This process considered the degree of consistency of the cognitive processes across the standards within each learning area and of cognitive demands of the standards across the learning areas.

ACER evaluated the coherence of the achievement standards within and across learning areas. This involved a systematic audit of the content of the achievement standards with reference to the Australian Curriculum. The audit focused on a review within each of four target learning areas – English, mathematics, history and science – but also included a review across the learning areas.

The final and elaborated criteria for the review within each learning area were:

Clarity (within each year level):

- Is the intention of the achievement standard clearly apparent from reading the standard?
- Characteristics affecting clarity include: expression, use of vocabulary and sequencing of ideas.

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Consistency between standards and curriculum (within each year level):

• Are the concepts, content and the language used to describe the standard and the curriculum consistent between them at each year level?

Consistency of concepts and content (across year levels):

• Do the standards represent learning progress through the years? Are the characteristics used to represent progress consistent (that is, is progress represented through the development of common concepts and/or content) and, if not, is this appropriate?

Curriculum fidelity (within each year level):

• Do the standards represent the **key** aspects of the learning area (rather than relying on peripheral content)?

Levelness (within each year level):

• Does the standard represent learning outcomes that are reasonable to expect of students at the end of the relevant year of schooling?

Measurability (within each year level):

 Is it clear from reading the standard (together with the curriculum and work samples) what type of assessment information (including but not limited to the design of assessment tasks) can be collected as evidence of achievement of the standard?

Relationship to work samples (within each year level):

• Do the existing work samples provide support to interpret the standard? This criterion includes the nature of the assessment tasks, the example student responses and the annotations used to link the work samples with the achievement standard.

The final and elaborated criteria for the review across the learning areas were:

Consistency of cognitive demand:

• Does the level of cognitive demand described and or implied by each pair of standards seem to be equivalent?

Language consistency:

• Are the style and syntax of the different standards consistent? Are the same terms used in equivalent ways across the learning areas?

3.3 Demographic data for validation activities

A total of 681 participants attended either national or state or territory run workshops during the validation of Foundation to Year 10 achievement standards for English, mathematics, science and history (Table 3.3.1). It is important to note:

- All states and territories participated in the two national validation workshops
- All states and territories undertook the ACARA designed activities 1 and 2 and all (except Victoria¹) undertook activity 5.
- of the 111 recorded as attending the national validation workshop on 16-17 June 2011, 102 completed Activity 5A (the survey)
- of the 88 recorded as attending to the second national validation workshop on 29 August 2011, 76 completed Activity 5A (the survey)

Workshop	English	Mathematics	Science	History	Total	% of total participants
National –						
16-17 June	28	28	24	22	102	15%
2011						
ACT	37	26	33	30	126	18.5%
NSW	9	4	3	3	19	3%
NT	8	7	6	5	26	4%
QLD	26	23	23	18	90	13%
SA	23	45	26	23	117	17%
TAS	11	13	9	12	45	7%
VIC	13	12	8	9	42	6%
WA	9	10	10	9	38	5.5%
National –						
29 August	18	22	18	18	76	11%
2011						
Total	169	178	152	140	681	100%

 Table 3.3.1: Workshops held and numbers of participants in each learning area

¹ In addition, Victoria undertook an independent trialing and validation exercise with 50 primary and secondary schools, representing all sectors and rural and urban locations, and submitted to ACARA a separate validation report

A further breakdown of the demographic data identifies participants according to sectors of schooling (Table 3.3.2). The state government school sector represents the majority (44%) of participants (302 participants). However, the combined Independent and Catholic school sectors represent 45% of respondents (305 participants) - an even split between public and private school sectors. 'Other' participants include those who have identified themselves as university personnel, indigenous/community perspectives or cross sectional/tri-sector representatives.

Sector of schooling	Number of participants	% of total participants
Government school	302	44%
Independent school	127	19%
Catholic school	178	26%
Education authority	62	9%
Other	12	2%
Total	681	100%

 Table 3.3.2: Number and percentage of participants by sector of schooling

Table 3.3.3 represents the breakdown of all participants (from across the two national workshops and state and territory run workshops) who identify themselves as primary teachers (ranging from Foundation to Year 7 – depending on the state/territory), secondary teachers (from Years 7 – 10), curriculum experts, from an education authority, or as other (responses include: middle years teachers, university academics, education consultants).

	Primary teachers	Secondary teachers	Education authority, curriculum experts or other	Total
National –	39	22	41	102
16 and 17 June	55	22	41	102
ACT	52	66	8	126
NSW	6	12	1	19
NT	12	5	9	26
QLD	41	20	29	90
SA	58	44	15	117
TAS	28	17	0	45
VIC	25	17	0	42
WA	24	12	2	38
National –	22	10	25	76
29 August	32	19	25	76

Table 3.3.3: Number of participants by stage of schooling and workshop

4. Validation feedback by learning area

4.1 Activity 1 – Sequencing achievement standards

In this activity participants in stages of schooling groups and the entire F-10 learning group sequenced the achievement standards from F-10. The activity aimed to test the extent to which:

- achievement standards describe an ordered sequence of skills and understanding from each year to the next
- the sequence of skills and understanding describe an increasing level of complexity across the year levels.

In the tables that follow, A represents the skills paragraph in the achievement standards for each learning area and B represents the understanding paragraph. The random numbers in orange are the ACARA sequence of achievement standards. The red highlights where there were points of difference with the ACARA sequence. G indicates 'group' and G(x) the number of groups completing the activity. National 1 refers to the national validation workshop held in June 2011, and National 2 refers to the follow up validation workshop held in August 2011.

4.1.1 Activity 1 - English

										EN	GLI	SH											
	N		NAL	WOR	KSH	<mark>) DP 1</mark> ,	STA	TE A	ND T	<mark>ERRI</mark>	TOR	Y WO	RKSH	10PS	and	NAT	IONA	L WC	RKS	hop	2		
		F-A	1-A	2-A	3-A	4-A	5-A	6-A	7-A	8-A	9-A	10-A	F-B	1-B	2-B	3-B	4-B	5-B	6-B	7-B	8-B	9-B	10-B
Sequence		4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
													1										
National 1	G1	4	61	6	63	71	85	16	10	3	88	28	14	83	49	91	29	100	42	13	51	58	19
	G2	4	61	6	63	71	85	16	10	88	3	28	14	83	49	91	29	100	13	42	51	58	19
VIC	G1	4	61	63	6	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
SA	G1	4	61	6	63	85	71	16	10	28	3	88	14	83	49	91	100	29	42	13	58	51	19
TAS	G1	4	61	6	63	71	16	85	10	28	88	3	14	83	49	91	100	29	42	13	51	58	19
QLD	G1	4	61	6	63	29	100	42	13	88	28	3	14	83	49	91	71	85	16	10	58	19	51
WA	G1	4	61	6	63	29	100	42	13	88	28	3	14	83	49	91	71	85	16	10	58	19	51
NT	G1	4	61	6	63	71	85	16	10	88	3	28	14	83	49	91	29	100	42	13	51	58	19
NSW	G1	4	61	6	71	63	85	16	10	28	3	88	14	83	49	91	100	29	42	58	51	13	19
ACT	G1	4	61	6	63	71	85	16	10	88	28	3	14	83	91	49	100	29	51	58	13	42	19
																	•						
National 2	G1	4	61	6	63	71	85	10	88	28	88	3	14	83	49	91	29	100	42	13	51	58	19

 Table 4.1.1: National and state/territory sequencing data for Activity 1 for English

From the first national workshop and state/territory data for English, it was evident that some participants had difficulty sequencing the skills between Years 8 and 9 and to a lesser extent Years 4 to 7. The sequencing of understanding was inconsistent for Years 4 to 9.

Following revisions to the English achievement standards, the data from the second national workshop (National 2) showed a marked improvement in participants' ability to correctly

sequence the standards, with some inconsistencies noted at Years 4 and 5 and Years 8 and 9. Further refinements were then made to the achievement standards for English to make the progression more evident.

									M	ATH	EM	ATIC	S										
	Ν		NAL	WOF	RKSH	OP 1,	STA	TE AI	ND TI	ERRI	TORY	WOR	KSH	OPS	and N		NAL	WOR	KSHC)P 2			
		F-A	1-A	2-A	3-A	4-A	5-A	6-A	7-A	8-A	9-A	10-A	F-B	1-B	2-B	3-B	4-B	5-B	<u>6-B</u>	7-B	8-B	9-B	<u>10-B</u>
Sequence		4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
National 1	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	42	29	100	13	58	51	19
	G2	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
VIC	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	42	29	13	58	51	19
SA	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	13	42	58	51	19
TAS	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
QLD	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
WA	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
NT	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
NSW	G1	4	61	63	6	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
	G2	4	61	63	6	85	71	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
	G3	4	61	6	63	71	10	16	83	28	88	3	14	83	49	29	91	100	42	13	58	51	19
	G4	4	61	63	6	71	16	85	10	28	88	3	14	83	49	91	100	42	29	13	58	51	19
ACT		-														49		29				51	
ACT	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	91	49	100	29	42	13	58	51	19
	~	4	61	6	62	71	05	16	10	20	00	2	11	02	40	01	100	20	40	10	E 0	51	10
National 2	G1 G2	4 4	61 61	6 6	63 63	71 71	85 85	16 16	10 10	28 28	88 88	3 3	14 14	83 83	49 49	91 91	100 100	29 29	42 42	13 13	58 58	51 51	19 19
Table 4.1 3			•••	•								•				• •			74	10	00	01	15

4.1.2 Mathematics – Activity 1

 Table 4.1.2: National and state/territory sequencing data for Activity 1 for Mathematics

Overall participants have been able to sequence the mathematics achievement standards with a high degree of success. However, there was evidence of some inconsistencies in skills in Years 5 and 6 and in understanding, primarily across Years 4 to 6.

Following revisions to the mathematics achievement standards, the data from the second national workshop showed a marked improvement in participants' ability to correctly sequence the standards.

										S	CIEN	ICE											
	١	NATIO	ONAL	. WOI	RKSH	IOP '	1, ST/	ATE /	AND	TERF	RITOF	<mark>RY WC</mark>	RKS	HOP	S and	I NAT	IONAI	- WO	RKSH	IOP 2	2		
		F-A	1-A	2-A	3-A	4-A	5-A	6-A	7-A	8-A	9-A	10-A	F-B	1-B	2-B	<u>3-B</u>	4-B	5-B	<u>6-B</u>	7-B	8-B	9-B	10-B
Sequence		4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
National 1	G1	4	61	6	63	71	16	85	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
	G2	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	29	100	42	13	58	51	19
	G3	4	61	6	63	71	85	16	28	10	88	3	14	83	49	91	100	29	42	13	58	51	19
VIC	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
	G2	4	61	6	63	71	16	85	28	10	88	3	14	83	49	91	29	13	100	42	58	51	19
SA	G1	4	61	63	6	71	16	85	28	10	88	3	14	83	49	91	100	29	42	13	58	51	19
TAS	G1	4	61	6	63	71	85	16	28	10	88	3	14	83	49	91	29	100	42	13	58	51	19
	G2	4	61	6	63	71	16	10	85	28	88	3	14	83	49	91	29	100	42	13	58	51	19
QLD	G1	4	61	63	6	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
	G2	4	61	63	6	71	85	28	16	10	88	3	14	83	49	91	100	29	42	13	58	51	19
WA	G1	4	61	63	6	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
	G2	4	61	63	6	71	85	28	16	10	88	3	14	83	49	91	100	29	42	13	58	51	19
NT	G1	4	61	6	63	71	10	16	85	58	51	19	14	83	49	91	29	100	42	13	28	88	3
NSW	G1	4	61	6	63	71	16	10	28	88	85	3	14	83	49	100	91	29	42	13	58	51	19
	G2	4	6	63	61	71	85	10	28	16	88	3	14	83	49	29	91	100	42	13	58	51	19
	G3	4	61	6	63	71	16	28	85	10	88	3	14	49	83	91	100	42	29	13	58	51	19
	G4	4	61	63	6	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
АСТ	G1	4	61	6	63	71	16	85	10	28	88	3	14	83	49	91	29	100	42	13	58	51	19
National 2	G1	4	6	61	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	51	58	19

 Table 4.1.3: National and state/territory sequencing data for Activity 1 for science

From the first national workshop and state/territory data for science, it was evident that some participants had difficulty sequencing the skills in Years 2 and 3 and Years 5 to 8. It was also evident that the progression for understanding was unclear for Years 4 to 8.

Revisions were made to ensure that each sub-strand of Science Inquiry skills was addressed for each year level. Additionally, the language and conceptual demand at each year level was reviewed to improve the progression of understanding in Years 4 to 8. Following revisions to the science achievement standards, the data from the second national workshop showed a marked improvement in participants' ability to sequence the standards, with some inconsistencies noted. Further refinements were then made to the achievement standards for science to make the progression more evident.

										н	STO	RY											
	N	ATIO	NAL	WOF	RKSH	OP 1	, STA	TE A	ND T	ERR	ITOR	Y WO	RKS	HOPS	S and	I NAT	IONA	L WC	ORKS	HOP	2		
		F-A	1-A	2-A	3-A	4-A	5-A	6-A	7-A	8-A	9-A	10-A	F-B	1-B	2-B	3-B	4-B	5-B	6-B	7-B	8-B	9-B	10-B
Sequence		4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19
National 1	G1	4	61	6	63	71	85	16	10	28	3	88	14	83	49	91	100	29	42	13	58	51	19
	G2		61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	51	58	19
VIC	G1	4	61	6	63	71	85	16	10	28	88	3	14	49	83	91	100	29	42	13	51	58	19
	G2	4	61	6	63	71	85	10	16	28	88	3	14	49	83	91	100	29	42	13	51	58	19
SA	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	51	58	19
TAS	G1	4	61	6	63	71	85	16	10	28	3	88	14	83	49	91	29	42	100	13	51	58	19
QLD	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	13	42	51	58	19
WA	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	13	42	51	58	19
NT	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	51	58	19
NSW	G1	4	61	6	71	63	85	16	10	28	88	3	14	83	49	91	100	42	29	51	13	58	19
	G2	61	4	6	71	63	16	28	10	85	88	3	14	83	49	100	91	29	13	58	42	51	19
	G3	61	4	6	71	63	10	28	85	88	16	3	14	83	13	49	91	100	58	51	42	29	19
АСТ	G1	4	61	6	63	71	85	16	10	28	3	88	14	83	49	91	100	29	42	13	51	58	19
National 2	G1	4	61	6	63	71	85	16	10	28	88	3	14	83	49	91	100	29	42	13	58	51	19

 Table 4.1.4: National and state/territory sequencing data for Activity 1 for history

From the first national workshop, participants were able to sequence skills and understanding across most year levels, with the exception of Years 9 to 10 for skills.

Feedback from subsequent validation activities by states and territories revealed that participants were able to sequence skills for most, if not all year levels. The exception was NSW, where respondents noted difficulties in sequencing skills across a number of year levels, particularly Years 3 to 4. While there was some disparate feedback on the sequencing of understanding across states and territories, difficulties were evident across Years 6 to 9 and in Years 8 to 9 in particular.

Following revisions to the history achievement standards, the data from the second national workshop showed a marked improvement in the sequence of the standards. Participants were able to clearly sequence both understanding and skills across all year levels.

4.2 Activity 5 - Learning area data at a national and state/territory level in relation to the following criteria: fidelity, clarity, sequence, pitch, coherence, usability²

Activity 5 refers to the questionnaire (Appendix 3) completed by all teachers who participated in the validation workshops (either national or state/territory). Participants were requested to consider a specific year level and respond by rating the achievement standards in terms of their fidelity, clarity, cequence, pitch, coherence and usability using a 4 point likert scale (Strongly Agree to Strongly Disagree).

For each learning area and against each of the criteria, the figures below indicate 'agree' data (aggregated 'strongly agree' and 'agree' ratings) and 'disagree' data (aggregated 'strongly disagree' and 'disagree' ratings).

English

(a) English: Fidelity (that is, representing the essential skills and understandings of the curriculum content at the year level)

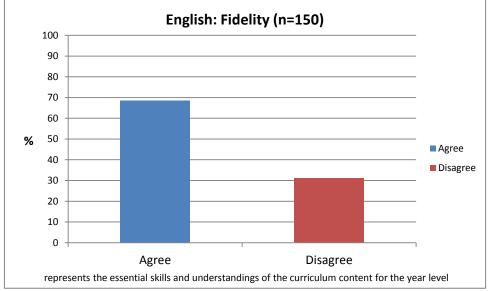


Figure 4.2.1: Aggregated data for National Workshop 1 and state and territory workshops

² NOTE: Victoria undertook activities 1 and 2 but not 5. However, data collected from Victoria's independent validation activities have been analysed within this report. NSW and NT completed Activity 5 but their numbers were relatively low.

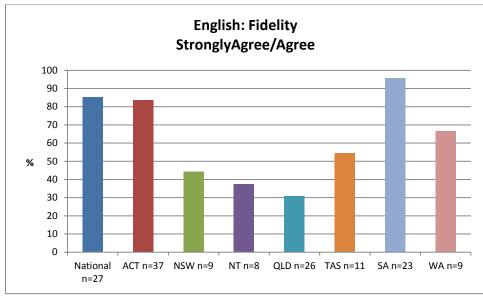


Figure 4.2.2: Disaggregated data for National Workshop 1 and state and territory workshops

The aggregated data for workshops (National Workshop 1 and State and Territory) shows relatively high (69%) level of agreement with fidelity. The SA and ACT participants displayed high levels of agreement on the matter of curriculum fidelity - that "the achievement standards represent the essential skills and understandings of the curriculum content at the year level". However, NSW, NT and QLD participants all showed low levels of agreement. Qualitative feedback revealed that low levels of agreement stemmed from:

- inconsistencies in the level of detail included in the achievement standard, for example the inclusion of spelling
- inconsistent use of language resulting in different interpretations.

(b) English: Pitch (that is, the skills and understandings are pitched appropriately)

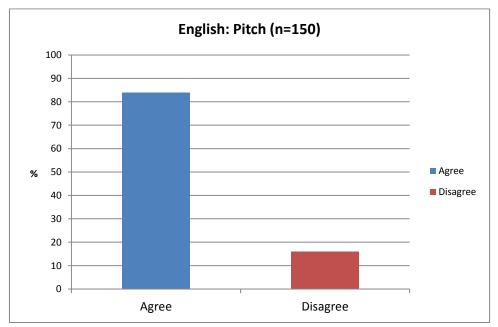


Figure 4.2.3: Aggregated data for National Workshop 1 and state and territory workshops

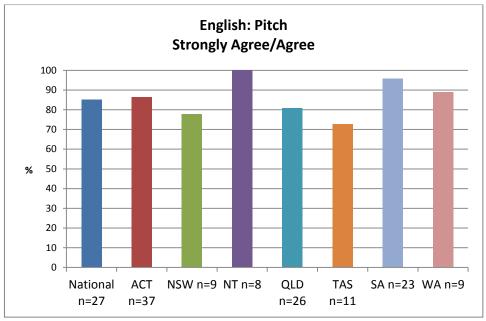
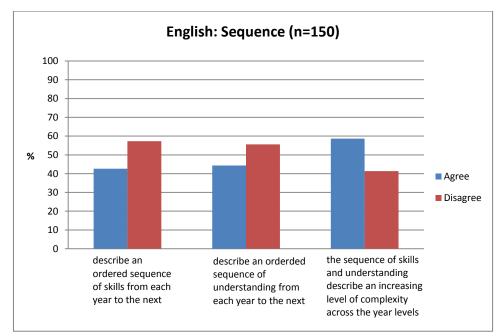


Figure 4.2.4: Disaggregated data for National Workshop 1 and state and territory workshops

Overall, there was high level agreement (84%) with pitch across the workshops. With the exception of NSW and TAS (over 70%), all states and territories recorded high levels of agreement (over 80%).



(c) English: Sequence

Figure 4.2.5: Aggregated data for National Workshop 1 and state and territory workshops

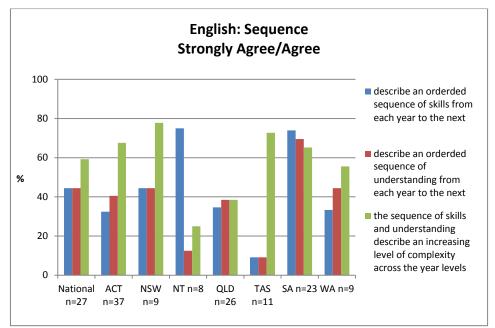


Figure 4.2.6: Disaggregated data for National Workshop 1 and state and territory workshops

Participants overall recorded low levels of agreement with sequencing. The quantitative data shows moderate levels of agreement for describing an increasing level of complexity across year levels (59%) and relatively low levels of agreement for sequencing understanding (44%) and sequencing skills (43%) from one year to the next.

Sequencing in skills from one year to the next received relatively high levels of agreement from NT(75%) and SA (74%) participants. All other states recorded lower levels of agreement.

Sequencing understanding from one year to to the next recorded relatively low levels of agreement, with the exception of SA participants (70%).

NSW (78%) and TAS (73%) participants recorded high levels of agreement in regards to the sequence of skills and understanding describing an increasing level of complexity across year levels. Moderate levels of agreement were recorded by ACT, SA and WA participants and low levels of agreement by QLD and NT participants.

Qualitative feedback indicated that:

- critical differences between some year levels was not obvious, particularly Years 4 to 9 in speaking and writing and Years 8 to 10 in listening, reading and viewing
- greater progression was required in the ordering of skills
- some year levels needed to be read together in order to determine the level of complexity from one year to the next, for example Years 1 to 3.

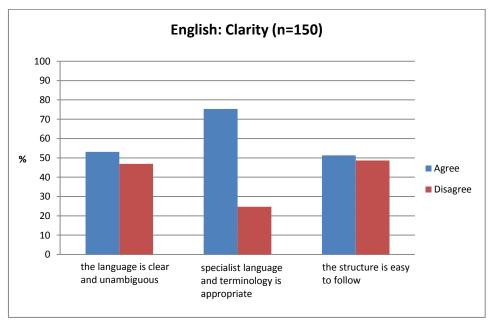


Figure 4.2.7: Aggregated data for National Workshop 1 and state and territory workshops

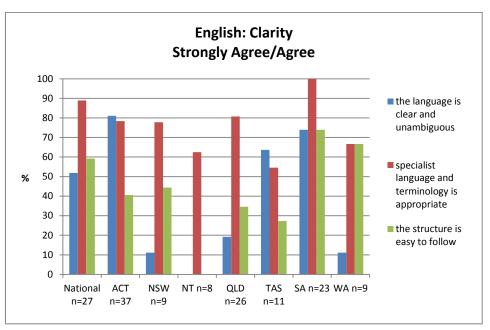


Figure 4.2.8: Disaggregated data for National Workshop 1 and state and territory workshops

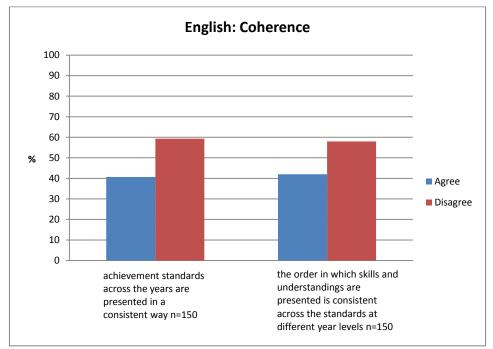
There was a relatively high level of agreement overall that the specialist language and terminology is appropriate. There were significant lower levels of participant agreement with language use (53%) and structure (51%).

SA participants had very high levels of agreement (100%) in regards to specialist language and terminology. This was followed by QLD (81%), ACT, (78%) and NSW (78%) participants. Moderate levels of agreement were recorded by WA and NT participants and lower levels of agreement by TAS participants.

Only ACT participants recorded high levels of agreement (81%) for clear and unambiguous language. Moderate levels of agreement were recorded by SA and TAS participants. QLD, WA and NSW participants recorded low levels of agreement.

Most states, with the exception of SA (74%), recorded low levels of agreement in relation to finding the structure of the achievement standards easy to follow. Areas requiring attention included:

- · the order of the sentences in the achievement standards was not consistent
- some terms were seen to be ambiguous and sentence structures were too complex and required simplicification
- some feedback indicated that the achievement standards should be presented by the language modes.



(e) English: Coherence

Figure 4.2.9: Aggregated data for National Workshop 1 and state and territory workshops

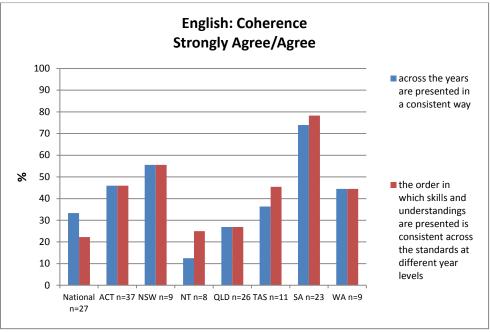
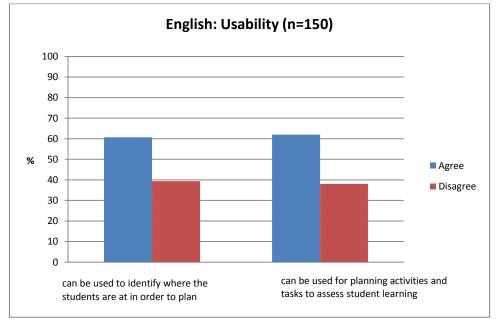


Figure 4.2.10: Disaggregated data for National Workshop 1 and state and territory workshops

The aggregated data for coherence shows low levels of agreement for consistency across year levels (41%) and low levels of agreement for skills and understandings being presented consistently across the achievement standards (42%).

Only SA participants demonstrated relatively high levels of agreement with both consistency across year levels (74%) and consistency with skills and understandings across the achievement standards (78%). NSW participants recorded moderate levels of agreement with all other states showing low levels of agreement. Areas of concern included:

- the ordering of sentences was not seen as consistent across the achievement standards
- there were inconsistencies in the level of detail in the achievement standards.



(f) English: Usability

Figure 4.2.11: Aggregated data for National Workshop 1 and state and territory workshops

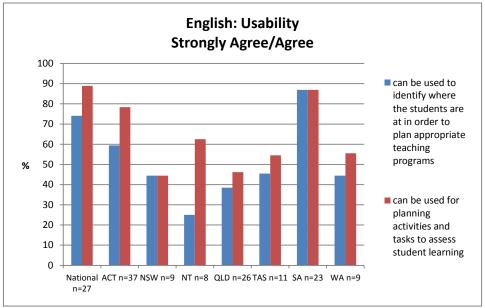


Figure 4.2.12: Disaggregated data for National Workshop 1 and state and territory workshops

Overall, there was a moderate level of agreement with regard to usability. 62% of participants agreed that the achievement standards could be used for planning activities and tasks to assess student learning. Further, 60% of participants agreed that the achievement standards could be used to identify where the students are in order to plan appropriate teacher programs.

SA participants recorded high levels of agreemeent for both planning teaching programs and planning activities and tasks to assess learning (87%). ACT participants recorded high levels of agreement with planning activities and tasks (78%) for student learning but only moderate levels of agreement for planning appropriate teacher programs. The remaining states recorded low levels of agreement for usability. Qualitative data highlighted concerns with:

- the absence of quality descriptions making it difficult to plan assessments
- content descriptions must be used in conjunction with the achievement standards in planning for assessment tasks
- annotated work samples will be required to assess student learning.

Mathematics

(a) Mathematics: Fidelity (that is, representing the essential skills and understandings of the curriculum content at the year level)

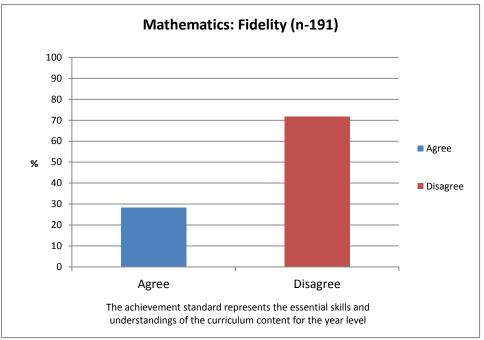


Figure 4.2.13: Aggregated data for National Workshop 1 and state and territory workshops

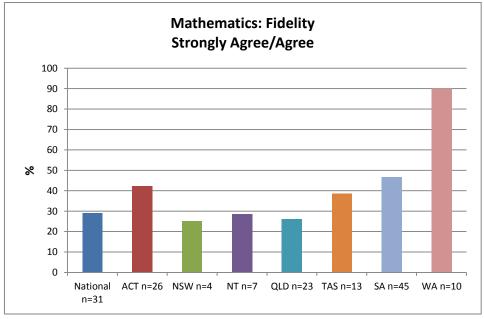


Figure 4.2.14: Disaggregated data for National Workshop 1 and state and territory workshops

Overall, low levels of agreement (30%) were recorded for Mathematics on the matter of curriculum fidelity - that "the achievement standards represent the essential skills and understandings of the curriculum content at the year level". All states with the exception of WA (90%) recorded agreement levels of less than 50%. Qualitative data demonstrated participant concern with:

 not enough presentation of the content in the achievement standards, for example measurement was not evident

- proficiency strands were not sufficiently evident
- in Year 10 some sub-strands were not reflected in the achievement standards.

(b) Mathematics: Pitch

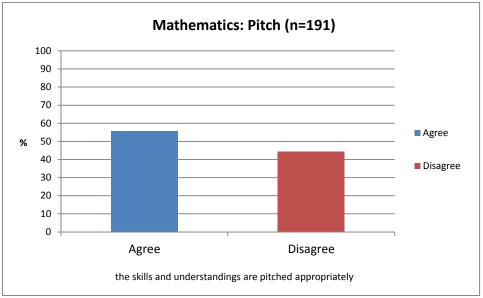


Figure 4.2.15: Aggregated data for National Workshop 1 and state and territory workshops

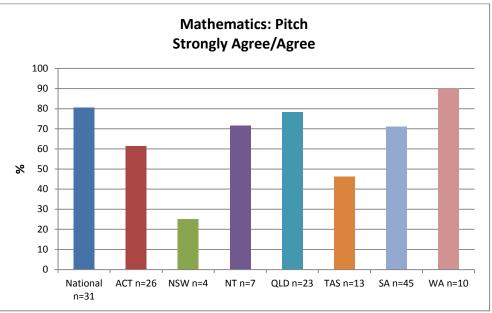


Figure 4.2.16: Disaggregated data for National Workshop 1 and state and territory workshops

Overall, there was moderate agreement that the level of pitch was correct for each year level (56%). However, there was varied level of agreement recorded from the state and territory data. WA (90%), QLD (78%) and NT(71%) participants recorded high levels of agreement with pitch. ACT participants recorded moderate levels of agreement, while TAS and NT participants recorded low levels of agreement. Qualitative feedback highlighted:

- some concern with Years 6, 7 and 9 in particular
- missing evidence of content in the achievement standards resulting in some misconceptions about the pitch or level of demand for those year levels
- the need for content descriptions to be read in conjunction with achievement standards to determine the pitch.

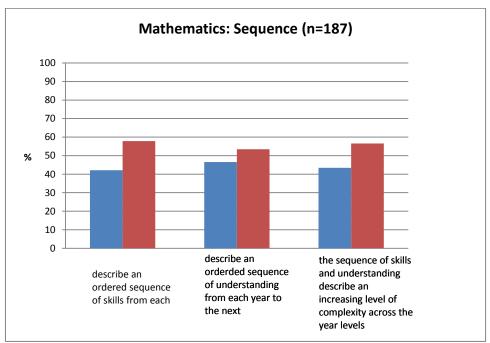


Figure 4.2.17: Aggregated data for National Workshop 1 and state and territory workshops

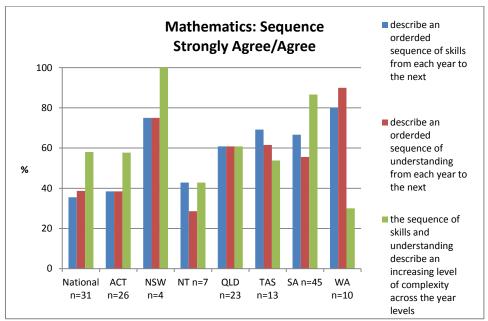


Figure 4.2.18: Disaggregated data for National Workshop 1 and state and territory workshops

Low levels of agreement were achieved for sequencing despite the mathematics achievement standards being relatively easy to sequence as evidenced by Activity 1- Sequencing. Overall, 42% of participants agreed that the achievement standards described an organised sequence of skills from each year to the next; 47% agreed that the achievement standards described an ordered sequence of understanding from each year to the next; and 43% agreed that the sequence of skills and understanding described an increasing level of complexity.

High levels of agreement for ordering the sequence of skills were recorded by WA (80%) and NSW (75%) participants. Moderate to lower levels were recorded by other states.

WA (90%) and NSW (75%) participants recorded high levels of agreement for ordering the sequence of understanding from each year to the next. Moderate levels were recorded by

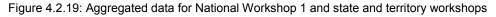
TAS, QLD and SA participants and low levels of agreement were recorded by ACT and the NT participants.

NSW participants recorded very high levels (100%) for the sequence of skills and understanding describing the increasing level of complexity across the year level. SA participants recorded high levels (87%) followed by moderate levels of agreement for TAS, QLD and ACT participants. Low levels of agreement were recorded by WA and NT participants. Qualitative feedback indicated that:

- the progression of measurement was not as clearly evident as with other strands
- due to the inability to differentiate between skills and understanding, there were inconsistencies in the sequencing of the achievement standards.

Mathematics: Clarity (n=191) 100 90 80 70 60 50 % Agree 40 Disagree 30 20 10 Λ the language is clear specialist language the structure is and unambiguous and terminology is easy to follow appropriate

(d) Mathematics: Clarity



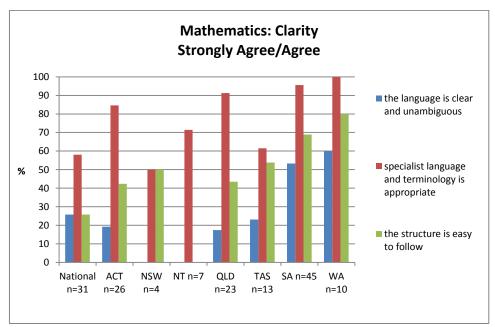


Figure 4.2.20: Aggregated data for National Workshop 1 and state and territory workshops

Overall, low levels of agreement were recorded for clarity. Specialist language and terminology was seen as moderately appropriate (57%). Structure was seen as difficult to follow (40%) and language was overwhelmingly seen to be unclear and ambiguous (25%).

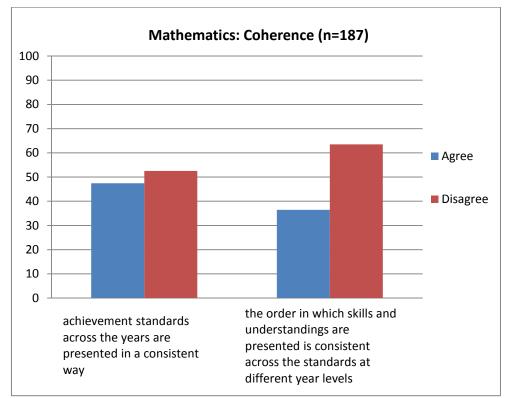
State and territory data recorded higher levels of agreement than the national data in relation to specialist language and terminology. WA, QLD, SA and ACT participants recorded high levels of agreement whilst TAS and NT participants recorded moderate levels of agreement. NSW participants recorded lower levels of agreement.

The states and territories also recorded greater levels of agreement for structure than the national data. WA recorded high levels of agreement whilst SA, TAS and NSW recorded moderate levels of agreement.

All states and territories recorded relatively low levels of agreement for language ambiguity.

Matters of concern included:

- the structure of the achievement standards, with the split into skills and understanding, sometimes clouded the development of concepts
- there were some concepts evident in the content descriptions that were missing from the standards
- the progression of measurement was not as clearly evident as it was for other strands.



(e) Mathematics: Coherence

Figure 4.2.21: Aggregated data for National Workshop 1 and state and territory workshops

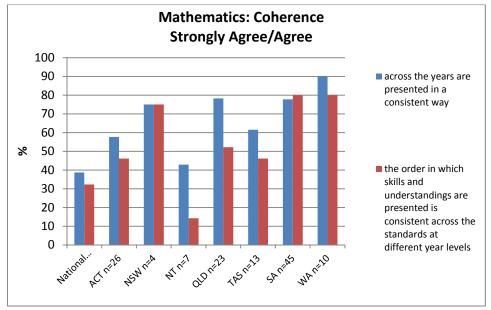


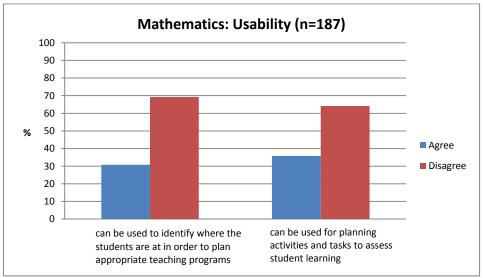
Figure 4.2.22: Disaggregated data for National Workshop 1 and state and territory workshops

Overall there was general disagreeement that achievement standards were presented consistently across years and that the order of skills and understandings (47%) were consistent. There was also general disagreement that the skills and understandings were consistent across the achievement standards at different year levels (36%).

There were varied levels of agreement in regards to consistency across the years. Despite the aggregated data for consistency across the years being low, WA (90%), SA (78%), QLD (87%) and NSW (78%) participants all recorded high levels of agreement.

The consistency in which the skills and understandings were ordererd across year levels also varied, with high levels of participant agreement from WA (80%), SA (80%) and NSW (78%) and low levels of agreement from other states and the national workshop. Qualititative data indicated:

- · there was clouded discernment between skills and understandings
- the placement of the content strands were not consistently applied in each paragraph
- there was not consistent use of verbs in describing skills and understanding.



(f) Mathematics: Usability

Figure 4.2.23: Aggregated data for National Workshop 1 and state and territory workshops

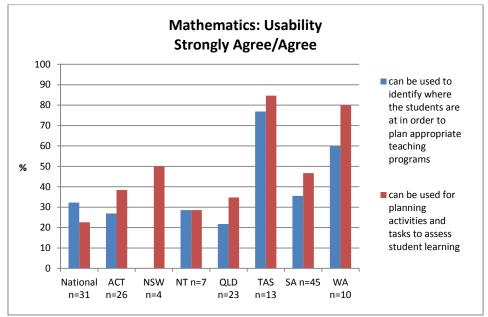


Figure 4.2.24: Disaggregated data for National Workshop 1 and state and territory workshops

Overall, there was a very low level of agreement in regards to usability. 36% of participants agreed that the achievement standards could be used for planning activities and tasks to assess student learning. Only 31% of participants agreed that the achievement standards identified where the students were at in order to plan appropriate teaching programs.

There was high level agreement from TAS (85%) and WA (80%) participants in regards to the achievement standards being used for planning activities and tasks to assess student learning. Low levels of agreement were recorded by other states and the national workshop.

In regards to the achievement standards identifying where students were at in order to plan appropriate teacher programs, high levels of agreement were recorded by TAS and WA and moderate to low levels by other states and territories and the national workshop. Qualitative feedback showed that participants indicated that:

- the achievement standards could not be used in isolation without the content descriptions
- teachers could not use the achievement standards as a tool for planning assessment due to the lack of clarity.

Science

(a) Science: Fidelity (that is, representing the essential skills and understandings of the curriculum content at the year level)

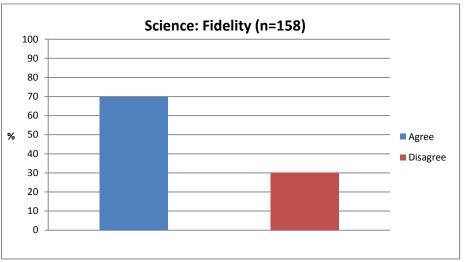


Figure 4.2.25: Aggregated data for National Workshop 1 and state and territory workshops

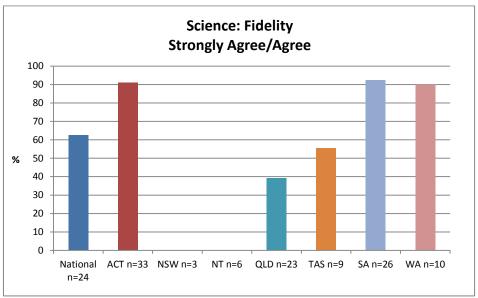
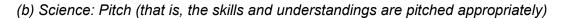


Figure 4.2.26: Disaggregated data for National Workshop 1 and state and territory workshops

The aggregated data for all workshops (National 1 and state and territory) shows a high level of agreement (70%) with curriculum fidelity.

ACT, SA and WA participants all displayed very high levels of agreement, with the statement that "the achievement standards represent the essential skills and understandings of the curriculum content at the year level". However, NT (n=6) and NSW (n=3) participants recorded high levels of disagreement with this statement. Qualitative feedback revealed that participants' low levels of agreement were as a result of:

- the under-representation of the Science as a Human Endeavour strand and Earth sciences
- the inconsistent specificity of the "big ideas" in science understanding.



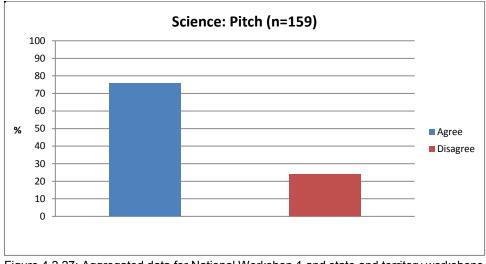


Figure 4.2.27: Aggregated data for National Workshop 1 and state and territory workshops

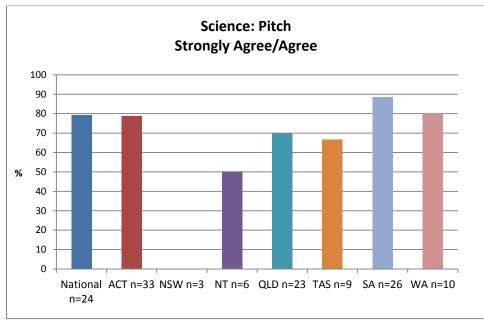


Figure 4.2.28: Disaggregated data for National Workshop 1 and state and territory workshops

The pitch of the achievement standards were broadly viewed as appropriate. 76% of respondents agreed that the skills and understanding were pitched appropriately for the year level.

Participants from SA (88%), WA (80%), ACT (79%) and QLD (70%) recorded relatively high levels of agreement with the statement that "the skills and understandings are pitched appropriately". NSW showed a high level of disagreement with this statement. Qualitative feedback highlighted some specific concerns arising across states and territories, notably:

- the achievement standards were seen to describe lower level skills in conducting investigations than the content descriptions
- the pitch for Year 5 was considered high by some states.

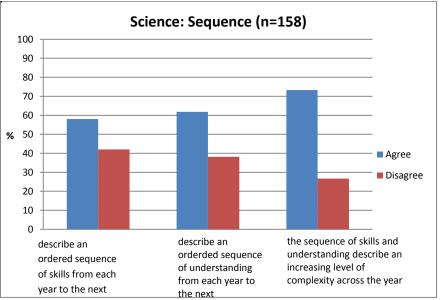


Figure 4.2.29: Aggregated data for National Workshop 1 and state and territory workshops

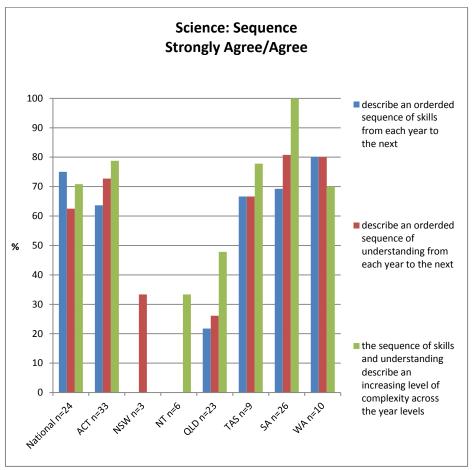


Figure 4.2.30: Disaggregated data for National Workshop 1 and state and territory workshops

The quantitative data overall shows relatively high levels of agreement (73%) for sequencing in terms of describing the levels of complexity across year levels. However, only moderate levels of agreement were demonstrated for ordering of skills (58%) and describing an ordered sequence of understanding (62%) from one year to the next.

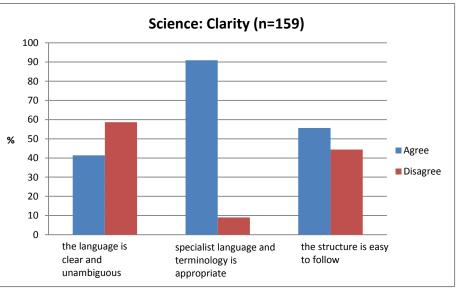
The statement "the achievement standards describe an ordered sequence of skills from each year to the next" received the lowest levels of agreement. WA participants recorded the highest level of agreement at 80% followed by participants from SA (69%), TAS (67%) and ACT (64%). NT and NSW participants had high levels of disagreement.

With regards to the statement "the achievement standards describe an ordered sequence of understanding from each year level to the next", participants from SA (81%) and WA (80%) recorded high levels of agreement followed by participants from ACT (73%) and TAS (67%). QLD and NSW participants recorded low levels of agreement and NT participants high levels of disagreement for this statement.

SA (100%) demonstrated very high levels of agreement with regards to the statement "the sequence of skills and understanding describe an increasing level of complexity across the year levels". This was followed by participants from ACT (79%), TAS (78%) and WA (70%). NSW participants recorded high levels of disagreement with regards to this statement.

Areas of concern across states and territories included:

- the sequence of achievement standards was unclear for understanding from Years 4 to 8
- the sequence of achievement standards was unclear for skills across Years 2 and 3 and from Year 5 to 8
- Science Inquiry Skills were seen as being introduced "haphazardly" across the year levels, although all skills were addressed over the two year bands
- Earth science and physics did not show a logical progression from one year level to the next.



(d) Science: Clarity

Figure 4.2.31: Aggregated data for National Workshop 1 and state and territory workshops

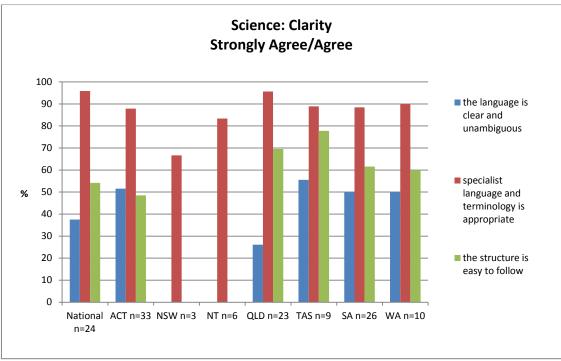


Figure 4.2.32: Disaggregated data for National Workshop 1 and state and territory workshops

The aggregated data shows a very high level (90%) of agreement with the statement "the specialist language and terminology is appropriate", but lower levels of agreement with the statements "the language is clear and unambiguous" (41%) and "the structure is easy to follow" (56%).

Only NSW had less than 80% agreement with the statement that specialist language and terminology is appropriate.

All states and territories showed low levels (less than 56%) of agreement with the statement "the language of the achievement standards is clear and unambiguous". TAS (70%) and QLD (78%) showed relatively high levels of agreement with the statement "the structure was easy to follow". Participants across all states and territories expressed the following concerns:

- the language of the achievement standards was considered ambiguous, particularly the verbs
- verbs were not used consistently and did not demonstrate the required conceptual depth in either skill or understanding.

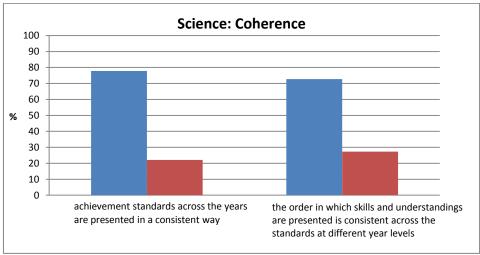


Figure 4.2.33: Aggregated data for National Workshop 1 and state and territory workshops

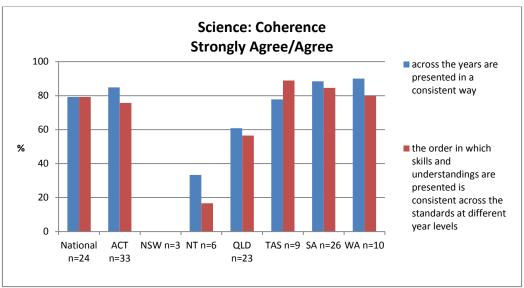


Figure 4.2.34: Disaggregated data for National Workshop 1 and state and territory workshops

At an aggregated level, there was strong agreement about the coherence of the standards. There were relatively high levels of agreement with the statement "the achievement standards are presented in a consistent way across year levels" (78%) and for the statement "the order in which skills and understanding are presented across the achievement standards is consistent at different year levels" (73%).

TAS, SA, WA and ACT participants expressed levels of agreement greater than 78%. QLD, NT and NSW participants' agreement levels were significantly lower than the other states with no agreement from NSW participants. With regards to ordering the skills and understanding consistently across the achievement standards, TAS, SA, WA and ACT participants had levels of agreement over 75% whilst QLD, NT and NSW participants were less than 58%. Specific areas for improvement identified across states and territories included:

- the Earth sciences aspect of the Earth and space sciences sub-strand was seen as under-represented in the achievement standards
- the Science Inquiry Skills descriptors were not well represented in every year level of the achievement standards.

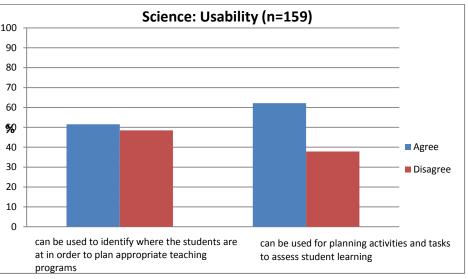


Figure 4.2.35: Aggregated data for National Workshop 1 and state and territory workshops

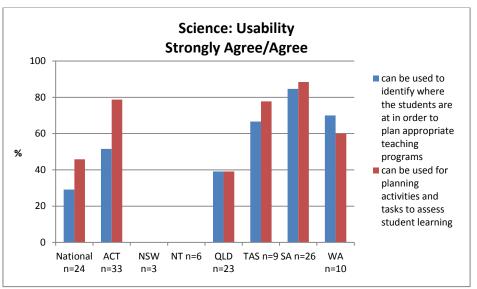


Figure 4.2.36: Disaggregated data for National Workshop 1 and state and territory workshops

Overall, the aggregated data showed a relatively low level of agreement with regards to usability. 62% of respondents agreed that the achievement standards could be used for planning activities and tasks to assess student learning. Only 52% of respondents agreed that the achievement standards could be used to identify where the students are at in order to plan appropriate teaching programs.

Over 79% of participants from SA, TAS and ACT agreed that the achievement standards allowed teachers to plan activities and tasks to assess student learning compared with lower level agreement from QLD, NT and NSW participants. Qualitative data highlighted that participants held the following views:

- achievement standards could not be used in isolation to plan and assess student learning programs, and the achievement standards needed to be viewed with both the content descriptions and elaborations
- annotated work samples will be essential in standardising assessment tasks.

History

(a) History: Fidelity

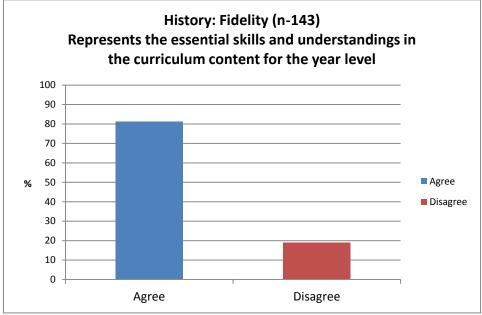


Figure 4.2.37: Aggregated data for National Workshop 1 and state and territory workshops

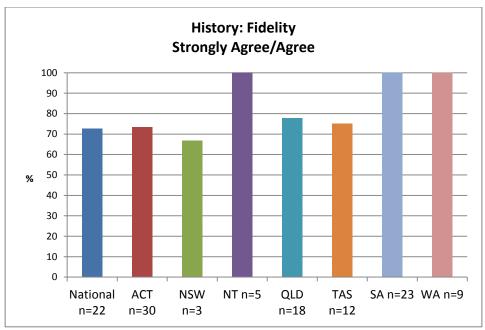


Figure 4.2.38: Disaggregated data for National Workshop1 and state and territory workshops

The aggregated data for workshops (National 1 and state/territory) indicated a significant majority agreed that the essential skills and understandings for each year level were represented in the relevant achievement standard (curriculum fidelity).

NT, SA and WA all indicated very high levels of satisfaction with fidelity, with the other states and territories all indicating moderate to high levels of satisfaction.

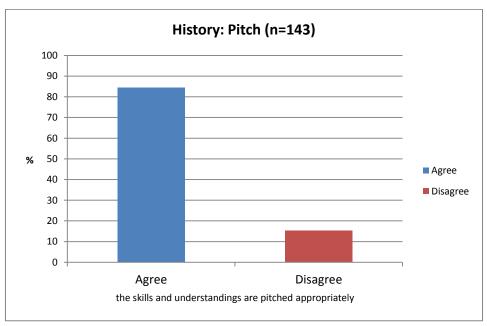


Figure 4.2.39: Aggregated data for National Workshop 1 and state and territory workshops

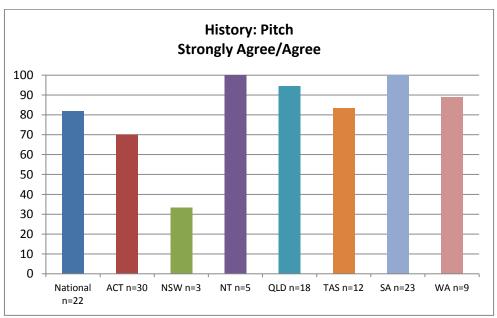
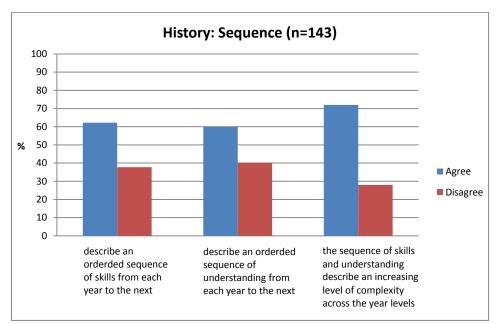
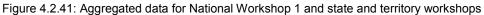


Figure 4.2.40: Disaggregated data for National Workshop 1 and state and territory workshops

The pitch of the achievement standards was viewed as appropriate by a significant majority. 85% of participants agreed that skills and understanding were pitched appropriately for the year level.

All states and territories indicated relatively high levels of agreement, except NSW which indicated a low level of agreement. Feedback from participants highlighted a concern with the inclusion of 'motives', 'values' and 'attitudes' in the achievement standards at various year levels. These were considered to be too demanding for the majority of students.





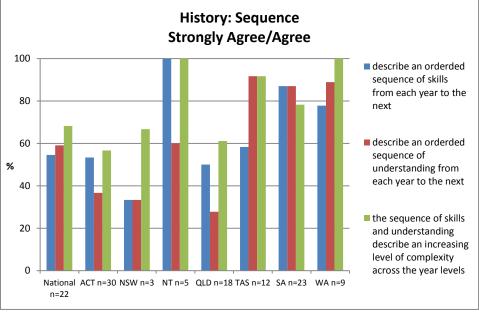


Figure 4.2.42: Disaggregated data for National Workshop1 and state and territory workshops

The quantitative data overall shows a relatively high level of agreement that the achievement standards describe an increasing level of complexity across the year levels. There were only moderate levels of agreement that there was an ordered sequence of skills (62%) and an ordered sequence of understanding (60%) from one year to the next.

The sequencing of skills indicated a high level of agreement by NT (100%) and SA (87%). Only NSW indicated a low level of agreement.

With regard to understanding, there was very wide variation in the level of agreement that the achievement standards represented an ordered sequence. TAS (92%), WA (89%) and SA (87%) indicated very high levels of agreement. QLD, NSW and the ACT indicated a low level of agreement (all below 40%).

NT (100%), WA (100%) and TAS (93%) indicated very high levels of agreement that there was an increasing level of complexity in the sequence of skills and understanding. All other states and territories indicated moderate levels of agreement or higher.

(d) History: Clarity

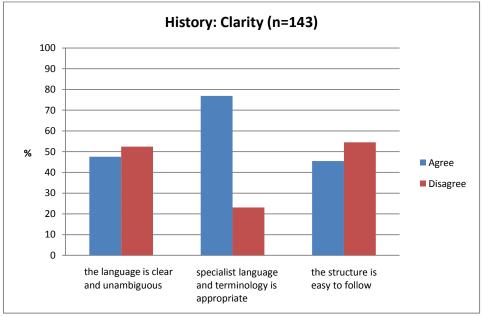


Figure 4.2.43: Aggregated data for National Workshop 1 and state and territory workshops

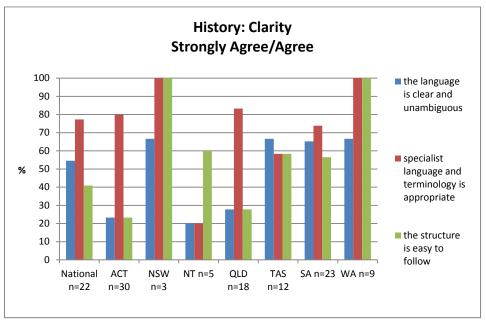


Figure 4.2.44: Disaggregated data for National Workshop 1 and state and territory workshops

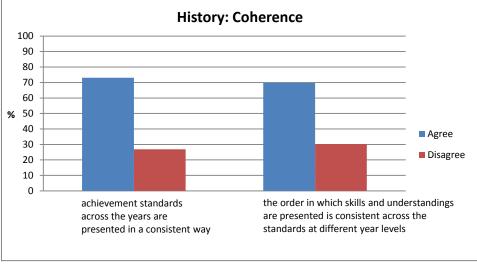
A significant majority agreed that the specialist language and terminology used in the achievement standards was appropriate. There were significantly lower levels of satisfaction with language use and structure.

Only NT (20%) had a very low level of satisfaction with specialist language and terminology. Participant comments pointed to concern about the difficulties the language/terminology may present to non-history trained teachers.

Most states and territories indicated moderate levels of agreement that the language used was clear and unambiguous. The ACT, NT and QLD showed very low levels of agreement (less than 30%). The comments from participants indicated that:

- greater consistency in the use of language across the standards was needed (it was not clear why some terms had been used in some year levels and not others)
- there needed to be further clarity about what a skill is and what an understanding is in relation to the language used.

There were very wide variations among the states and territories in the level of agreement that the structure of the achievement standards was easy to follow, from NSW and WA (both 100%) to the ACT and QLD (both less than 25%). All other states and territories indicated moderate levels of agreement. Participants requested that the structure be revised to make it easier to follow the development of particular skills and conceptual understandings across the year levels.



(d) History: Coherence

Figure 4.2.45: Aggregated data for National Workshop 1 and state and territory workshops

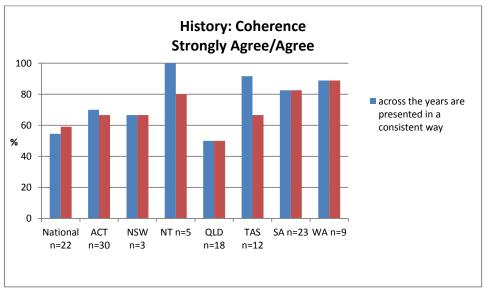


Figure 4.2.46: Disaggregated data for National Workshop1 and state and territory workshops

The achievement standards were considered to be presented in a consistent way across the year levels by the majority of participants. Similarly, the order of skills and understandings was agreed to be consistent across the various year levels.

Across states and territories, the level of agreement in relation to consistency of presentation ranged widely from NT (100%) to QLD (50%). The consistency of presentation in the order of skills and understandings across different year levels indicated variation also, with WA (88%), SA (81%) and NT (80%) showing a high level of agreement. QLD indicated the lowest at 51%. Participant comments indicated that there needed to be a clearer sense of order and pattern within the acheivement standards.

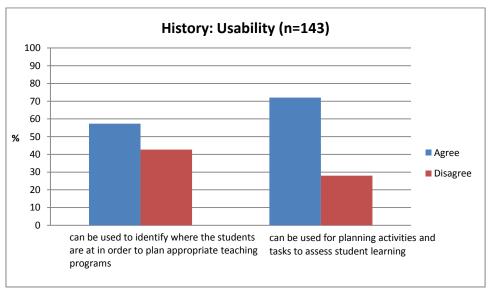


Figure 4.2.47: Aggregated data for National Workshop 1 and state and territory workshops

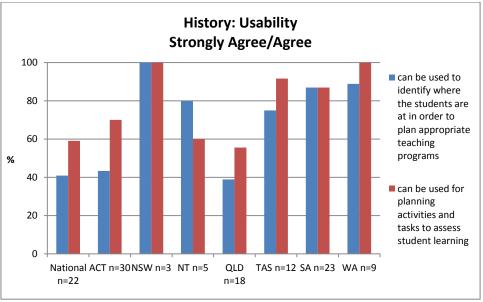


Figure 4.2.48: Disaggregated data for National Workshop 1 and state and territory workshops

The majority of participants agreed that the achievement standards could be used to plan activities and tasks to assess student learning. There was a lower degree of satisfaction (58%) about the usability of the achievement standards to identify where students are at in order to plan appropriate teaching programs.

NSW, SA, WA and TAS indicated a high level of agreement that the achievement standards were useable for both identifying where students are at and for planning activities/tasks to support student learning.

The lowest levels of agreement were from the ACT and QLD, specifically in relation to identifying where students are at for programming purposes. Participant comments highlighted:

- the need to make reference to the content when reading the achievement standards
- the use of imprecise language in the standards, particularly adjectives such as 'appropriate'.

5. Summary of key findings and actions taken in response to validation feedback

This chapter includes the data from all the validation activities, the responses in terms of revisions made to the achievement standards, and the improvements noted by teachers over the course of two national validation workshops, one at the beginning of the process and one near the end.

Section 5.1 provides an overview of the key findings from each of the major activities undertaken as part of the validation process:

- A. National and state/territory teacher validation workshops
- B. Validation of the Australian Curriculum: Mathematics and English using the NAPLAN Scales by ACARA's Assessment Group
- C. Systematic linguistic and cognitive audit of the Australian Curriculum: English, mathematics, science and history achievement standards by the Australian Council for Educational Research

Section 5.2 is a summary of the issues identified during July and early August from all the sources of data, including the three major activities listed in Section 5.1 and any additional validation feedback received from states and territories, notably the feedback from the validation activities in Victoria. This section also indicates the key actions taken in response to that feedback data as the focus for revision of the achievement standards. In addition, this section captures any additional issues and actions taken in response to feedback from state and territory authorities at meetings between 22-31 August 2011 on the draft revised achievement standards.

Section 5.3 reports on the two national teacher workshops conducted on 16-17 June 2011and then again on 29 August 2011. The same teachers (and curriculum experts) who participated in validation workshops on the initial achievement standards participated in similar activities on the revised achievement standards. The extent of improvement in the sequence, pitch, clarity and usability of the revised achievement standards is noted in this report and further validates the final revised achievement standards.

5.1 Overview of key findings from the three validation activities Activity A: National and state/territory teacher validation workshops

Following is the list of findings from the first national and subsequent state and territory workshops:

General

Attention needed to be paid to the following:

- 1. The conceptual demand and increasing complexity of the standards in terms of understanding and skills
- 2. A review of the essential concepts and content represented in the achievement standards
- 3. The identification and consistent application of threads of understanding and skills across Foundation to year 10
- 4. The definition and consistent application of verbs used in the achievement standards.

English

- 1. The order of the sentences in the achievement standards was not consistent
- 2. Critical differences between some year levels were not obvious, particularly Years 4-9 in the productive and Years 8-10 in the receptive paragraphs
- 3. Some terms used were ambiguous ('some', 'relevant'); sentence structures were sometimes too complex and could be simplified
- 4. There were inconsistencies in the level of detail included in the achievement standards, for example the inclusion of spelling
- 5. Some feedback indicated that the standards should be presented by the language modes.

Mathematics

- 1. The purpose and intent of the achievement standards was not consistently understood (applicable to all learning areas)
- 2. The progression of measurement was not as clearly stated as the other strands
- 3. The structure of the achievement standards, with the split into skills and understanding, sometimes clouded the development of the concepts
- 4. There were some concepts that were evident in the content descriptions that were not evident in the achievement standards
- 5. There were not enough 'proficiency' words used in the achievement standards.

Science

- 1. The sequence of achievement standards was not clear across science understanding from Years 4-8
- 2. There was preference for a more consistent level of specificity with regard to content/big ideas in the achievement standards, especially with regard to the science understanding paragraph

- 3. The Science as a Human Endeavour strand was seen as under-represented in the achievement standards
- 4. The Science Inquiry Skills were seen to be introduced 'haphazardly' across the year levels, although all skills were addressed over the two year bands
- 5. The Earth Sciences concepts were seen as under-represented in the achievement standards.

History

- 1. There was a lack of discernible progression in the achievement standards for Years 8-9 in the skills and for Years 9-10 with understanding
- 2. There was a lack of structural alignment (in the order/pattern of statements within a standard from one year level to another)
- 3. There were some examples of imprecise and inconsistent use of language
- 4. There was a lack of clarity about the quality of expected learning in the F-2 achievement standards, leading to difficulty in making judgments between 'high' and 'medium' levels of proficiency in work samples.

Activity B: Validation of the Australian Curriculum: Mathematics and English using the NAPLAN Scales by ACARA's Assessment Group

The review resulted in the following recommendations:

- 1. Modification of the curriculum to reduce overlap between year levels. Inspection of the easiest and hardest items aligned to content at each year level may identify possible modifications
- 2. Modification of the curriculum to ensure that the relationship between curriculum difficulty and student achievement is consistent across years and domains
- 3. Addition of content descriptions where validation data indicates that there is insufficient guidance for users of the curriculum
- 4. Development of appropriate work samples exemplifying content descriptions and achievement standards, to guide the reporting of students' progress against the Australian Curriculum
- 5. Provision of more detailed information about the complexity and demands of the reading texts with which students are expected to engage at different years of the curriculum
- 6. Calibrating the curriculum directly, by trialing items written specifically to content descriptions
- 7. Undertaking further quality assurance processes, which may involve ACARA's curriculum and assessment staff, as well as representatives from each educational jurisdiction. This could strengthen or refine the conclusions of this study, and assist the implementation of the Australian Curriculum.

Activity C: Systematic linguistic and cognitive audit of the Australian Curriculum: English, mathematics, science and history achievement standards by the Australian Council for Educational Research

Following is the list of recommendations resulting from the review:

- 1. In reviewing and revising the standards, it is important to adopt the critical perspective that the standards as a set should tell the story of learning growth in the learning area rather than individually restate the described curriculum content at each year level
- 2. Provide greater support to teachers to understand the extent of knowledge that is expected for each standard. This should be a focus of any newly published annotated work samples. If teachers are expected to infer the extent of knowledge from the curriculum content at each year level, then this should be explicitly stated in the curriculum and support documents
- 3. Confirm that the order of presentation of related content and concepts is consistent across the different year levels within each learning area
- 4. Revise the standards within each learning area to ensure that related concepts and content are presented together and in an order consistent with the presentation of the same content and concepts within the curriculum within each year level
- 5. Use the term "a variety of" consistently within and across the learning area curriculums and standards
- 6. Conduct an audit of glossary definitions to ensure that all requisite terms are defined, including those technical terms contained within the definitions of other terms in the glossary
- 7. Conduct a final audit of each achievement standard and the relevant curriculum statements in each learning area to ensure that the concepts in each standard are explicitly referenced by the curriculum
- 8. Conduct a final audit of each achievement standard to ensure that the content and concepts represented in the standard reflect the breadth of content and concepts in the curriculum
- 9. Identify the common themes of progress that span ranges of year levels within each learning area and ensure that the achievement standards for all the year levels within the range make reference to the relevant themes
- 10. Once the standards have been revised, conduct an audit to ensure that the key indicators or learning growth described in the standards are congruent with the core elements of the curriculum at each year level. Rectification of inconsistencies may involve amendments to either or both of the curriculum and the standards
- 11. Evaluate the processes (such as *investigate* and *describe the relationship between*) referred to in each standard to ensure that they provide sufficient guidance regarding the nature of assessment tasks that could be used to collect evidence of achievement.

In particular, whether the *depth* of the process is sufficiently described to support the development of appropriate assessment activities

- 12. Ensure that the text length and language complexity of the achievement standards at any given year are broadly similar across learning areas
- 13. Further revision and review of the standards should be consistently evaluated from the perspective of how well the standards are telling the story of student learning growth.

5.2 Summary of major issues by learning area and responses (as focus for revision) by ACARA

Table 5.2.1: English F-10 achievement standards

- The achievement standards represented the essential understanding and skills of the curriculum content
- Specialist language and terminology used in the achievement standards were considered appropriate
- The pitch of each achievement standard was appropriate for most year levels
- The standards were broad and, when read in conjunction with the content descriptors, were comprehensive

Issues	Focus for revision
1. The order of the sentences in the achievement standard was not consistent	 Reviewed the order of the sentences in the achievement standards and applied a consistent structure F-10. This has been achieved by developing the following structure: Receptive understanding – purpose, how language works to create effects Receptive skills – mechanics F-2, comprehension, interpretation, listening Productive understanding – purpose, point of view, how different effects are created Productive skills – skills needed to write and speak, mechanics F-3, speaking
2. Critical differences between some year levels are not obvious, particularly levels 4-9 i speaking and writing and levels 8-10 in listening, reading and viewing	 reviewed the use of verbs to ensure progression
3. Some terms used are ambiguous; sentence structures are	 Rewrote sentences, removing ambiguous terms for example, 'some', 'relevant' Simplified sentence structures so that most sentences

sometimes too complex and could be simplified	contain one idea. For example, in Year 3 the original wording was, 'They communicate expressively and clearly about familiar ideas and information to known small audiences, in mostly informal situations.' It has been amended to read, 'They contribute actively to class and group discussions, asking questions, providing useful feedback and making presentations'
4. There are inconsistencies in the level of detail included in the achievement standards, for example the inclusion of spelling	• Maintained consistency by keeping the statements broad rather than narrow, for example, at Year 2 the original wording was, 'they use sound letter correspondence to help spell words correctly in their writing'. This has been broadened to 'they accurately spell familiar and attempt to spell less familiar words'
5. Some feedback indicated that the standards should be presented by the language modes In responding to this feedback, issues of inclusivity and equity have been raised	 Developed an alternative view of the achievement standards by mode using the framework of reading and viewing, listening and speaking and writing
	 Included explicit statements for listening and speaking for every year level in the receptive and productive view,
	 o They listen for and identify different emphases in texts, using that understanding to elaborate upon discussions o They make presentations and contribute actively to class and group discussions, using language features to engage the audience
	• A statement is included in the organisation of the learning area that 'for some students, teachers will need to make appropriate adjustments to the complexity of curriculum content' It follows that adjustments will also need to be made to how the student's progress is monitored, assessed and reported. Terms such as listen, speak, read, view, and write have been included in the glossary and defined to ensure inclusivity
6. Feedback from state authorities was to emphasise multimodal	• The term 'texts' is defined in the English glossary, for example 'texts can be written, spoken or multimodal and in print or digital/ online form'
texts, spelling, editing, visual elements and handwriting	 Spelling has been included from F-10
	Editing has been included from 3-10
	 Visual elements have been included from F-10
	Handwriting has been included from F-3

- There was evidence of the proficiencies
- The progression in most areas was evident •
- The pitch of each achievement standard was appropriate for each year level •
- For some year levels, the achievement standards are clear and precise •

Iss	ues	Focus for revision
1.	The purpose and intent of the achievement standards was not consistently understood. They need to be read in conjunction with the content	 Clear messages included about the structure and purpose of the achievement standards, and that teachers are to use the achievement standards and the content descriptions together when planning for learning
2. The progression of measurement was not as clearly stated as the other strands	 Revised achievement standards included those key concepts that are evident in the content but not currently explicit in the achievement standards 	
	 Mapped achievement standards across year levels according to the strands and sub-strands, and by understanding and skills 	
		 Included a measurement concept in each understanding and skill at each year level
3.	 The structure of the achievement standards, with the split into skills 	 Revised the placement of understanding and skills to align consistently with the definitions of understanding and skills
and understanding, sometimes clouded the development of the concepts	• Revised each paragraph in the order of the strands and sub-strands of Number and Algebra, Measurement and Geometry, and Statistics and Probability for consistency in the classification of the understanding and skills across year levels	
		 Evaluated the placement of understanding and skills and rewrote each paragraph to be consistent with the mapping of the skills and understanding for each year level
		 Ensured each new concept was contained in one sentence so there are no combinations of concepts included in the sentences
		 Evaluated the use of verbs in each of the paragraphs to ensure consistent use to describe the understanding and skill required at each year level

4. There are some concepts that are evident in the content descriptions that are not evident in the achievement standards	 Revised achievement standards to include those key concepts that were evident in the content Cross-checked the achievement standards against the content descriptions to see the progression and development of the concepts Mapped the achievement standards along threads within the sub-strands of each strand to ensure the alignment of the content with the standards
5. There are not enough 'proficiency' words used in the achievement standards	 Revised each paragraph of the achievement standards into the two paragraphs of understanding and skills, in the order of the sub-strands as part of the strands of Number and Algebra, Measurement and Geometry and Statistics and Probability, to include the proficiencies Mapped achievement standards against the proficiency words used in the content descriptions for each year level. For example, in Year 8 the 'proficiency' words 'recognise', 'apply', 'describe', 'make connections', 'identify', 'deduce', 'determine', 'explain' and 'communicate' are included in the achievement standard
	 Mapped the proficiency year level statements to the achievement standards to ensure the inclusion of the four proficiencies in the achievement standard for each year level
6. There is not necessarily alignment of the content strands and the achievement standards	 Mapped the achievement standards in a year by year progression Cross-checked the achievement standards against the content descriptions to see the progression and development of the concepts Revised achievement standards to include those key concepts that are evident in the content but were not explicit in the National Forum achievement standards
7. There is no evidence of digital technologies in the achievement standards	 It is assumed that students will be taught mathematics with an extensive range of technological applications and techniques. However, there is also the need for students to continue to develop understanding and skills that do not depend on technology The achievement standards reflect the understanding and skills of the mathematics learnt and not the use of
	 The phrase 'efficient strategies' will be added to the glossary to include statements about the use of digital technologies

- The achievement standards were able to be ordered with few issues
- The progression in the skills paragraph was clear
- The specialist language and terminology used was deemed to be appropriate
- The pitch of the achievement standards were viewed as broadly appropriate

Issues	Focus for revision
 The sequence of achievement standards was not clear for understanding from Years 4-8 	 Reviewed each year level to ensure all Science Understanding and Science as Human Endeavour sub-strands were represented to ensure clear progression Reviewed language use and conceptual demand to ensure statements within each sub-strand demonstrated increasing complexity across the years of schooling Where appropriate, used the language and intent of the Science Understanding 'key concepts' to signal conceptual development Maintained a broadly consistent order of statements to reflect the sub-strands of chemical science, physical sciences, Earth and space sciences and biological sciences, followed by Science as a Human Endeavour
 2. The sequence of achievement standards was not clear for skills from Year 2-3 and Years 5-8 Science Inquiry Skills were seen to be introduced 'haphazardly' across the year levels, although all skills were addressed over the two year bands 	 Reviewed each band of year levels to ensure Science Inquiry Skills content descriptions (in two-yearly bands) were represented over the two years Ensured each sub-strand of Science Inquiry Skills was addressed for each year level by revising statements to reflect either part of a content description, a conceptually less complex version of the content description (if the lower year level of the pair) or the entire content description, as appropriate Maintained a broadly consistent order of statements to reflect the sub-strand order

3. Inconsistent specificity with regard to expression of content/big ideas in the achievement standards, especially with regard to the science understanding paragraph	 Reviewed the science understanding statements to ensure that all statements were written at a higher conceptual level than the content description/s but could be clearly linked to the content descriptions Where appropriate, used the language and intent of the Science Understanding 'key concepts' to signal conceptual development
4. The Science as a Human Endeavour strand was seen as under-represented in the achievement standards	 Reviewed each band of year levels to ensure Science as a Human Endeavour content descriptions (in two- yearly bands) were represented over the two years Ensured each sub-strand of Science as a Human Endeavour was addressed for each year level by revising statements to reflect either part of a content description, a conceptually less complex version of the content description (if the lower year level of the pair) or the entire content description, as appropriate
5. The Earth sciences concepts were seen as under-represented in the achievement standards	 Revised statements at each year level to ensure the Earth and space sciences sub-strand was represented and to ensure clear progression in key concepts Reviewed language use and conceptual demand to ensure statements demonstrated increasing complexity across the years of schooling
6. The language of the achievement standards was seen as ambiguous, particularly the verbs	 Revised verbs to consistently demonstrate required conceptual depth with reference to a skill or understanding Developed a glossary of verbs to provide a consistent meaning and aid consistent use (applicable across other learning areas)

- Clearer structure and focus based on understanding and skills
- Achievement standards and content were well aligned
- The achievement standards represented the essential skills and understandings at each year level
- The achievement standards were pitched at the appropriate level for each year
- A clearly identifiable sequence in historical skills across most year levels
- The specialist language used in the achievement standards was appropriate to teachers of the year level
- The achievement standards could be used for planning activities and tasks to assess student learning for most year levels

Issues	Focus for revision
 Lack of discernible progression in the achievement standards for understanding at Years 8-9 in particular (and Years 6-7 and Years 1-3 for some); and in skills mainly across Years 6-10 	 Audited the skills and understandings currently represented at each year level Adjusted language to provide clarity about what is an 'understanding' and what is a 'skill' Moved particular statements from 'understanding' to 'skills' where they have been misplaced (for example, a statement used in Year 10 for 'understanding' is now in 'skills) Used verb combinations and other strategies to describe greater complexity in expected learning and to strengthen the sequence from one year level to another (for example, more explicit reference to 'analysis' and 'evaluation'; drawing on the more cognitively demanding part of a skill to differentiate between year levels, where skills are described across a two year band) Placed a 'skill' in a context using a specific stem to describe a greater complexity in application Reviewed the UK attainment targets as an additional reference point for identifying useful language for making discriminations between the year levels, only where this is broadly consistent with the Australian Curriculum history content
 Lack of clarity about what is an 'understanding' and what is a 'skill' in the standards 	 Coded and tracked where key concepts where represented within the standard and reviewed how they were described Moved particular statements from 'understanding' to 'skills' where they have been misplaced Strengthened the understandings described through statements that explicate the key concept

	• Adjusted the language to provide clarity about what is a 'skill' and what is an 'understanding' (emphasis in the types of verbs that are used, for example, 'sequence' and 'locate' for skills, and 'explain' for understanding)
3. Lack of structural alignment (in the order/pattern of statements within a standard from one year level to another)	 Identified existing threads in particular conceptual understandings and skills in the achievement standards Strengthened the order/pattern within 'skills' to better reflect the sub-strands Used common stems for clearer recognition of order and pattern across the standards (for example, 'students develop', 'when evaluating') Removed inconsistencies in language across the standards for which there is no clear justification (for example, 'key' and 'main' in relation to 'events')
4. Some examples of imprecise and inconsistent use of language	 Reviewed the standard for each year level against the content to identify differences in the use of language Removed as appropriate verbs and adjectives that lack meaning, such as 'appropriate' and 'simple' Made the language in the standard more consistent with the content where it does not detract from the 'complexity' described in the standard Revised statements in the standard that are unnecessarily complex to ensure clarity and readability Removed inconsistencies in language across the standards for which there is no clear justification (for example, 'compose' and 'construct' replaced with 'develop', which is used in the skills content in relation to historical texts) Added unclear terms that are unclear to the glossary to clarify the meaning of language used in the standard (for example, revised the language used to describe 'texts' and included a glossary definition)
5. Lack of clarity about expected learning in the F-2 achievement standards, leading to difficulty in making judgments using work samples	 Removed, as appropriate, verbs and adjectives that lack meaning, such as 'appropriate', 'simple' Strengthened as appropriate the use of higher order thinking verbs in the F-2 years, for example 'examine', 'compare', 'explain' and 'analyse'

5.3 Changes from first to second National Validation Workshop

The second national validation workshop held on 29 August 2011 was designed to give participants the opportunity to review trends in national and state/territory validation data and the proposed revisions to the achievement standards in response to the issues identified. Participants were also able to provide feedback and undertake further validation activities with the revised achievement standards.

This workshop followed the analysis of all validation activities, including the first national validation workshop on 16-17 June 2011, subsequent state and territory-run workshops, advice from state and territory meetings, validation of the English and mathematics achievement standards using the NAPLAN scales and an Australian Council for Educational Research (ACER) audit report.

Section 5.2 outlined the overall findings and key actions taken by ACARA to revise the Foundation to Year 10 achievement standards for English, mathematics, science and history. Participants at the final workshop were initially asked to comment on the appropriateness of the actions ACARA took in response to the feedback received.

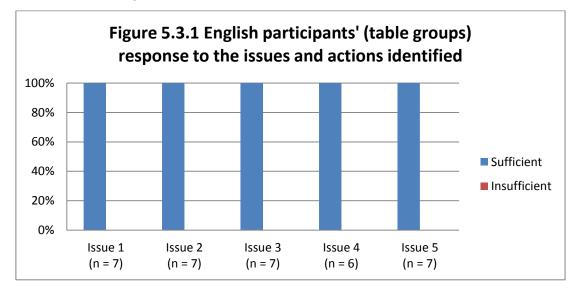
Participants discussed within stage of schooling groups whether the actions taken were sufficient to address the issues. Across all learning areas, 100% of teacher participants agreed that ACARA had captured the main issues raised in the original workshop in June 2011.

Also, to ensure consistency in the analysis of the revised achievement standards for English, mathematics, science and history, participants undertook the same validation activities (Activities 1 and 5) as in the first national workshop.

The findings below reflect participants' responses to the issues identified and ACARA's actions to address the issues. This is followed by a comparison of the data from the first workshop (held on 16-17 June 2011) to the data from the final workshop (held 29 August 2011).

English

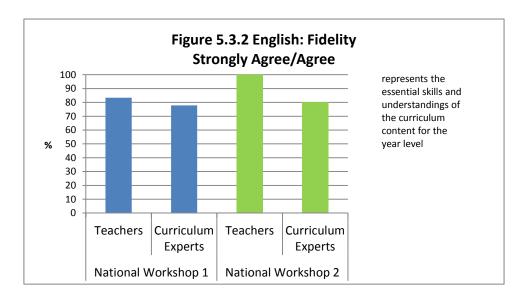
Participants in the English workshop agreed that ACARA's actions in response to all issues raised during the validation process (as reported in Section 5.2) were sufficient. Feedback from one group was that "ACARA seems to have acknowledged and attended to the main issues identified through the validation activities".



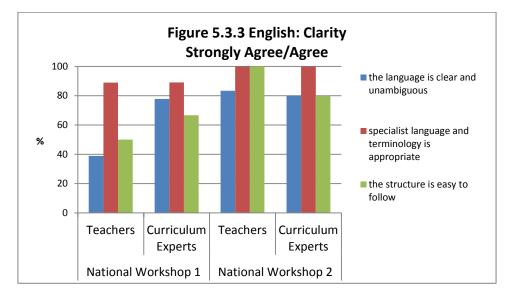
With regard to the first issue - *the order of the sentences in the achievement standards was not consistent* - one group noted that "the reordering of sentences should make the achievement standards easier for teachers to use to make consistent judgements about student work."

On the fourth issue regarding inconsistencies in the level of detail included in the achievement standards, one group of participants noted that spelling at Year 2 was vague – "all people spell familiar words and attempt difficult words – even adults." It was explained that the standards need to be viewed with the content in the curriculum to provide detail as to what is to be taught.

Responses from participants in terms of the fidelity, clarity, pitch, usability, sequence and coherence at the English achievement standards workshop are reported below.



F-10 Achievement Standards Validation Report: Summary of key findings and action taken in response to validation data 62 This result reflects greater agreement from both teachers and curriculum experts on the fidelity of the English achievement standards. Teachers, in particular, agreed that the revisions that took place closely represented the skills and understandings in the English content. It was also noted by a group of participants that "a big improvement is present - they are broad enough to show understanding rather than knowledge. You need to go back to the content, which is good."



English: Clarity

The results above show a marked improvement in judgements about the clarity of the English achievement standards from both teachers and curriculum experts alike across all three areas identified. Comments reflected an appreciation of the clarity of the English achievement standards:

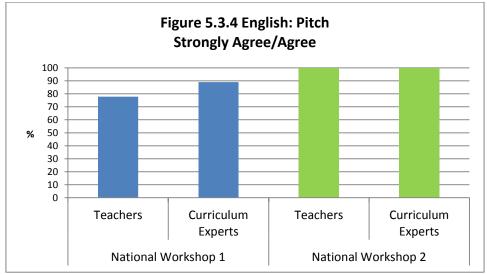
"Really like the new flow between year levels - easy to compare."

"The new version of achievement standards is much improved on previous one."

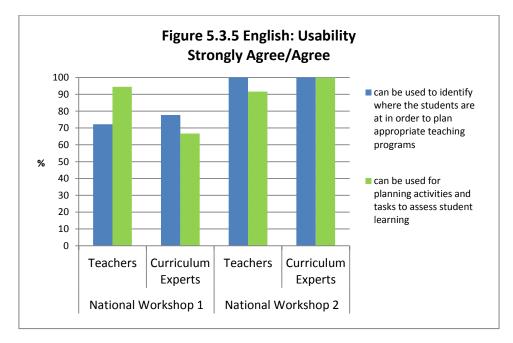
"Vast improvement in terms of readability."

"Much improved! Thank you. The AS from F-3 are coherent and a hierarchical sequence is evident."

English: Pitch



The pitch of the English achievement standards was of minor concern in the first workshop, however at the second workshop participants (both teachers and curriculum experts) were in 100% agreement that the English achievement standards were now pitched appropriately. Comments from participants included that "skills are easier to understand what is required to be displayed by the student and there is increased complexity evident with each year level". Although some believed they are pitched a little high, they were a "good level to aim for (teach to)".



English: Usability

Confidence in the use of the English achievement standards has improved with the revised achievement standards. Both teachers and curriculum experts were in agreement that the revised English achievement standards can be used to identify where students are at and to plan teaching programs.

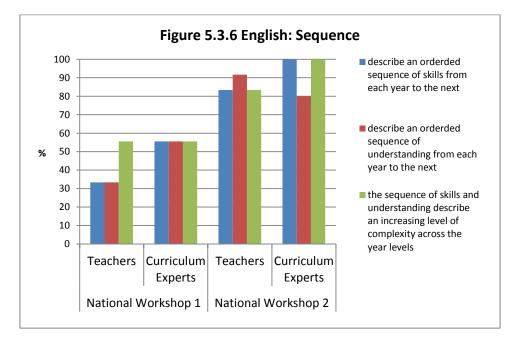
The majority of teachers and curriculum experts also agreed that the revised English achievement standards could be used to plan activities and tasks to assess student learning.

F-10 Achievement Standards Validation Report: Summary of key findings and action taken in response to validation data 6 A minority of teachers noted concerns about implementation and the need for familiarity of the achievement standards, with comments such as:

"As I became more familiar with these and use them in my planning/teaching they should become easier and more straight forward."

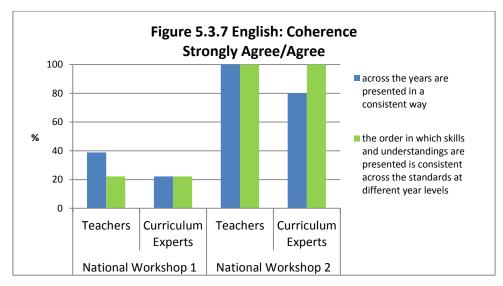
"This is because we have not been told what level the standards are pitched to on an A-E scale. It is not clear to me how we will assess using the standards."

English: Sequence



The table above shows a strong improvement in participant agreement on sequence of the revised English achievement standard in the range two years below and two years above their year group. Over 80% of participants agreed there was a strong improvement in all three areas of skills, understanding and increasing complexity.

English: Coherence



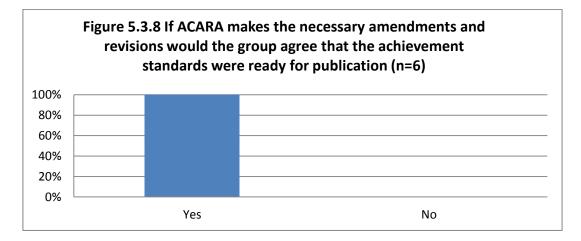
The table above clearly indicates a strong level of agreement about the coherence of the revised achievement standards – both across the years and the order in which skills and understandings are presented. Comments from participants also reflect this:

"Improvements from previous validations."

- "I like the structure looking at the modes in a constant way."
- "A big improvement."
- "Can see consistency when read in conjunction with the content."

In summary, the level of agreement by participants in the second workshop substantially increased in all areas of fidelity, clarity, pitch, usability, sequence and coherence when validating the revised English achievement standards. It was evident in the feedback that the issues noted by ACARA through the validation process had been addressed in the revisions.

Finally, respondents were also asked in group discussions if ACARA made the necessary amendments and revisions as outlined by the group, would the group agree that the achievement standards were ready for publication. As the figure below indicates, all participants at the English workshop agreed that, following minor revisions, the English achievement standards would be ready for publication.



F-10 Achievement Standards Validation Report: Summary of key findings and action taken in response to validation data 66

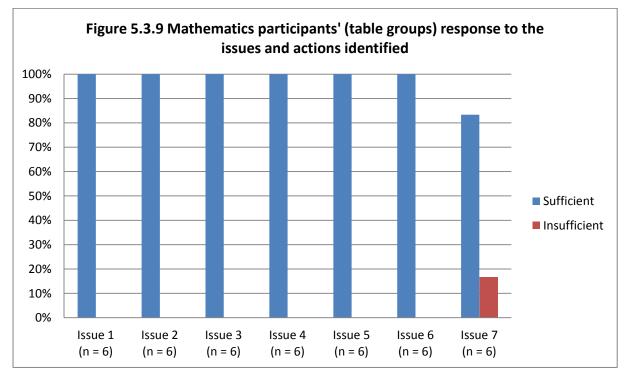
Mathematics

Participants in the Mathematics workshop were confident of ACARA's actions in response to the feedback received as noted in the table below. Comments from participants in the mathematics workshop confirmed the actions taken by ACARA to revise the mathematics achievement standards:

"From what we see, they have addressed our concerns. The talk at the start of today was further clarification, very comprehensive. We were pleased to hear from Rob that national assessment will be forthcoming after all curriculum areas are released. We wait with enthusiasm!!"

"We are pleased that you have listened to advice from teachers and split the paragraphs into understandings and skills. The fact is they have kept the sequence in each paragraph consistent across all year levels, for example number mentioned first in each year level AS."

"Again, the fact that all content and concepts are now covered in the achievement standards is a big step forward, as teachers will use the AS for assessment, and if content is not mentioned, they will not teach it! The reality is that teachers will use the AS first! (although we now know they must be looked at with content descriptors)"



Participants all agreed that ACARA's actions to issue one, on the *purpose and intent* of the achievement standards, was sufficient. It was also noted by one group that "It was made clear in Rob Randall's presentation that the achievement standards should be read in conjunction with content descriptors. This needs to be clearly stated in new rewrite of the Australian Curriculum on website." This clarity at the beginning of the workshop assisted all participants in reviewing the findings and the revised achievement standards.

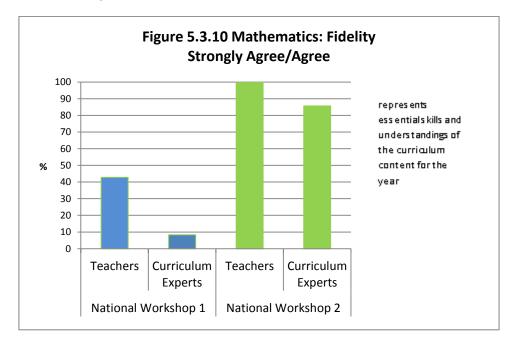
Issue 7 related to the evidence of digital technologies in the achievement standards. Over 80% of participants agreed that the focus of revisions were sufficient, with one group of

F-10 Achievement Standards Validation Report: Summary of key findings and action taken in response to validation data 67 participants looking for further clarity about the use of calculators and digital technologies in the achievement standards:

"Needs to be represented in work samples with annotations. Needs to be consistent across the learning areas... Technology is not mentioned in maths until Year 3, however they will be using technology before then. This needs to be represented. Note the difference between using technology to solve mathematical problems and the use of technology in a multimodal context to demonstrate learning."

"Teachers need to be given clarification as to when to use technology, what concepts they need to understand with or without the use of calculators."

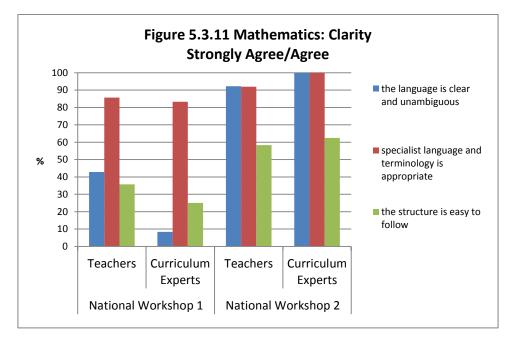
Participant responses to the fidelity, clarity, pitch, usability, sequence and coherence of the revised achievement standards at the second national validation workshop held on 29 August 2011 are presented in further detail below.



Mathematics: Fidelity

The table above shows marked improvement in the representation of essential skills and understanding of the curriculum content for the year. It is also a clear increase in both teacher and curriculum experts' confidence in their use, as described by one participant: "The language 'flows' much better from F upwards, terminology is more appropriate and easier to follow."

Mathematics: Clarity



Major improvements in clarity were noted by the participants with the revised mathematics achievement standards. This was specifically evident in the clarity of language and the appropriateness of specialist language and terminology in the achievement standards. Although there was general support for the structure of the achievement standards, feedback indicated that some participants were still having problems with the paragraph structure around skills and understandings:

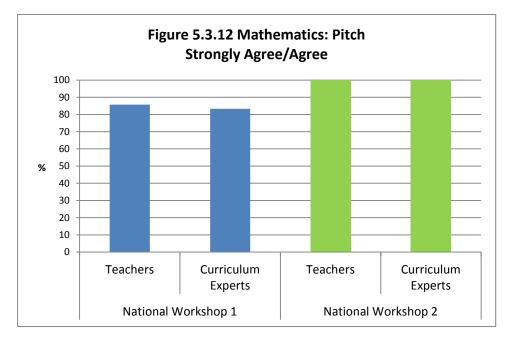
"I'm not sure I totally agree with the classification of skills and understanding. For example, Recognise coins skills - understanding their value is an understanding."

"Dividing up the skills + understanding makes it very difficult to follow a concept area through. Going from one year to another you find gaps For example mapping."

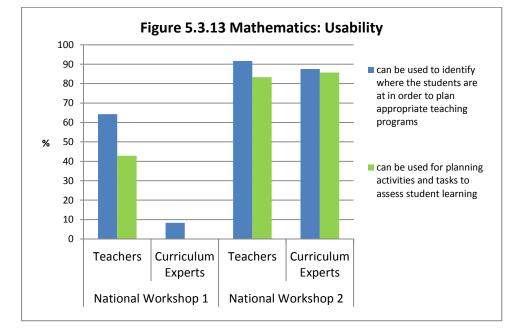
"The classification of understanding and skills is not at all clear - it is a distracting layer for teachers - trying to work out why it was classified as an understanding and not a skill and vice versa. Would be better to organise around the proficiencies or even the content strands."

Following the second national workshop, further refinements were made to the mathematics achievement standards to address this feedback.

Mathematics: Pitch



Although there was already strong agreement regarding the pitch of the mathematics achievement standards, there has been a further increase in the confidence of participants (100%) about the pitch of the revised achievement standards.



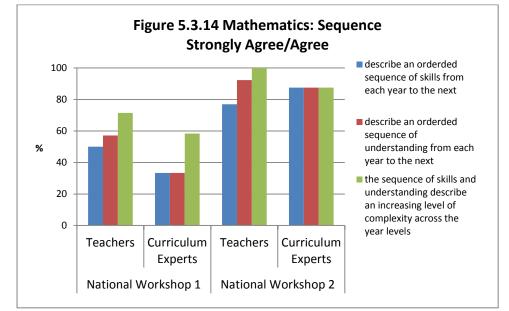
Mathematics: Usability

The table above shows marked improvement in the usability of the revised mathematics achievement standards. Both teachers and curriculum experts demonstrate their confidence in being able to use the achievement standards:

"I think the inclusion of partitioning numbers using place valve plus the numerous other inclusions/additions have created a document which can be used to program and assess students learning accurately."

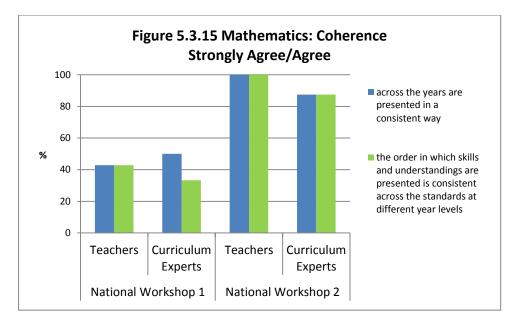
"I really like this. I think. However, without actually doing this planning, I cannot be sure and I am trying not to let my natural optimism take control here. However, the A.S do look better than most other curriculum docs I have seen."

Mathematics: Sequence



Participants agreed that the revised achievement standards did describe an ordered sequence of skills and understandings from one year to the next, and an increasing level of complexity across year levels, as observed from the table above. While participants still noted a need to strengthen the skills and understandings in the revised mathematics achievement standards, participants also noted that the "consistent approach and order makes for easy reading across year levels".

Mathematics: Coherence



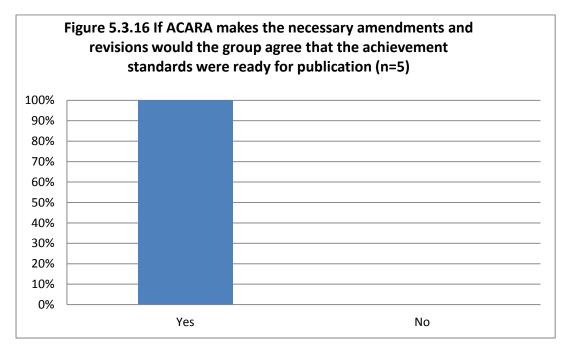
The evidence above indicates teachers' (and curriculum experts') confidence in the coherence of the revised mathematics achievement standards both across the years and the order in which skills and understandings are presented.

F-10 Achievement Standards Validation Report: Summary of key findings and action taken in response to validation data 71 As with English, the level of agreement by all participants in the second mathematics validation workshop substantially increased in all areas of fidelity, clarity, pitch, usability, sequence and coherence. It is evident in the findings that the issues noted by ACARA through the validation process have been addressed in the revisions made, and the findings from the second validation workshop clearly articulate this. The comments below best illustrate the views of mathematics participants towards the revised achievement standards:

"Congratulations on the revised AS. It was great to see how our feedback given in the June sessions impacted on the revised standards... The sequencing and flow is now far more succinct. Very user friendly".

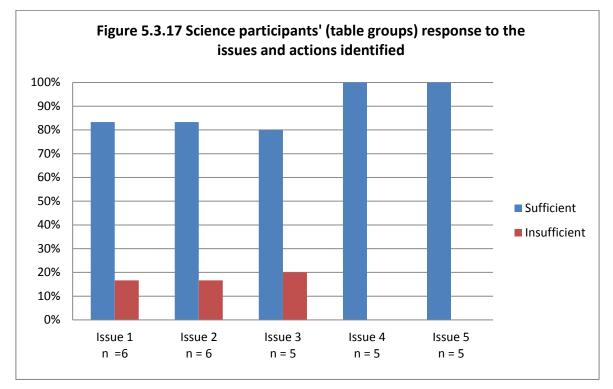
"Thank you for taking notice of our comments from last time/session. I fell you really took notice of our feedback."

Finally, respondents were asked if ACARA made the necessary amendments and revisions outlined by the group, would the group agree that the achievement standards were ready for publication. As the table below presents, all participants at the Mathematics workshop agreed that, following minor revisions, the Foundation to Year 10 mathematics achievement standards would be ready for publication.



Science

The table below shows participants' responses to the feedback ACARA had identified from consultation on the achievement standards and the actions it took in response (refer to section 5.2).



Across all five issues identified by ACARA, most table groups agreed that the actions outlined by ACARA were a sufficient response to the feedback provided.

"The language from SU [Science Understanding] linked across to the achievement standards is good to see. Allows them to be linked clearly. Makes them more user-friendly for the teacher."

"Glossary is good to have, particularly if used across all subjects."

A minority of respondents provided feedback on issues 1, 2 and 3, outlining the need to be mindful that achievement standards, particularly as they reflect the Science Inquiry Skills strand, do not become a repetition of the curriculum content:

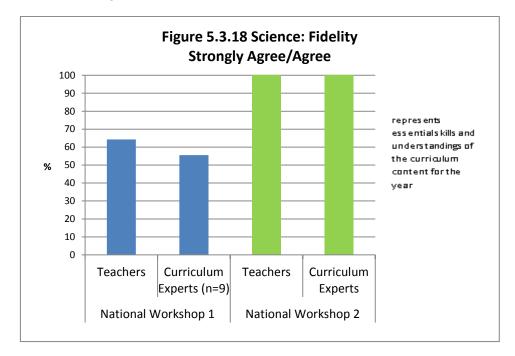
"The understanding standards still refer to the phenomena in the content description, not the underlying concepts."

"Worried that the SIS [Science Inquiry Skills] becomes a regurgitation of the content description. Also worried that the differences between the two statements in each year level for the same inquiry skills will be different for the sake of being different, as was the case with the first draft of the content descriptions..."

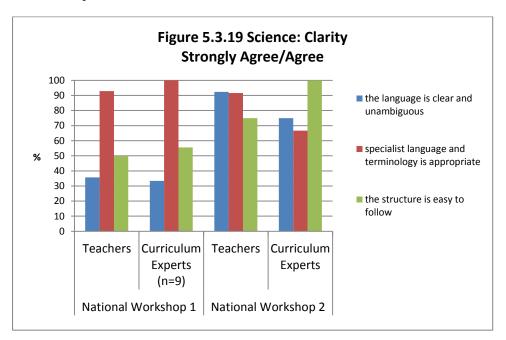
"The A.S. [achievement standards] should NOT be an abridged version of content. The issue was not clearly identified from previous consultation. Action required -remove content!!"

Participant responses to the fidelity, clarity, pitch, usability, sequence and coherence of the revised achievement standards at the second national validation workshop held on 29 August 2011 are presented in further detail below.

Science: Fidelity



There was 100% agreement from both teachers and curriculum experts that the revised achievement standards represented the essential skills and understandings of the curriculum content for the year, compared to the science achievement standards presented to participants in June. The strong agreement suggests that feedback raised in the first workshop has been addressed in these revisions.

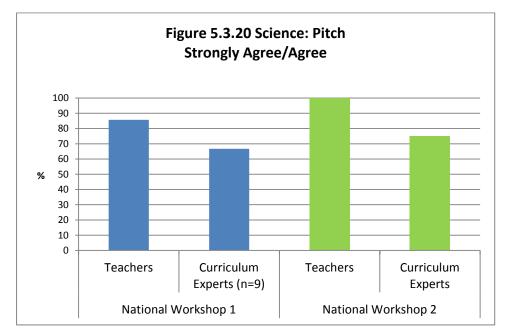


Science: Clarity

Participants agreed that there has been an improvement in both the language and structure of the revised achievement standards for science, evident in the table above, with high levels of agreement across the two areas. Feedback from participants showed that there was a need to further refine the language to ensure specialist language and terminology is appropriate especially in the primary years:

"Language has an altered meaning in the scientific field and generalist teachers may need to go to the glossary to ensure correct understanding for example Year 4 'apply' observable properties and year 5 'classify' substances according to their observable properties and features."

Following the second national workshop, ACARA undertook further revision to address this concern.

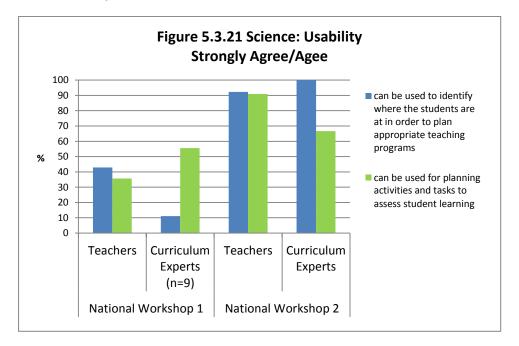


Science: Pitch

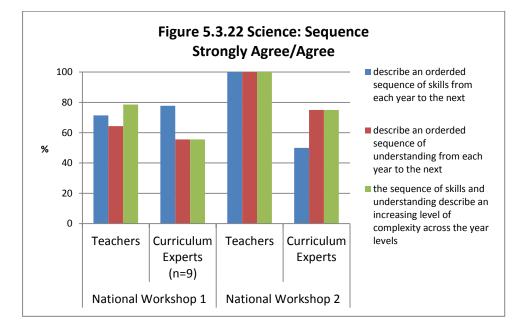
The table above indicates that teachers particularly agreed that the pitch of the revised achievement standards was appropriate. There was an increase in agreement from curriculum experts from the first to second workshops. However, participants highlighted the following concern:

"The use of the words identify and design suggests a high (year 9) cognitive demand in the 1st sentence of the 2nd paragraph. It's [sic] intent isn't as suited to this year levels standard. Consider changing IDENTIFY AND DESIGN for construct questions and identify problems."

Science: Usability



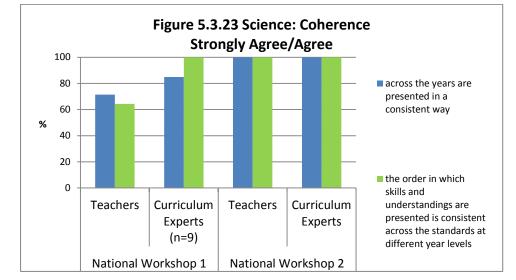
Following revisions made to the usability of the achievement standards for science, the table above indicates a clear improvement in the usability of the science achievement standards – both in their use to plan appropriate teaching programs, and to assess student learning. Curriculum experts' perception of the usability of the science achievement standards was slightly more positive, with feedback suggesting that minor revisions should be made to strengthen the achievement standards to be used for planning activities and tasks to assess student learning.



Science: Sequence

Teachers wholly agreed that the sequencing of the revised achievement standards described an ordered sequence of skills, understandings and increasing complexity from one year to the next and across year levels.

Feedback that ACARA took into consideration from participants included the request for "some minor tweaking of language used in skills achievement students required as per the F-10 Achievement Standards Validation Report: Summary of key findings and action taken in response to validation data 7 glossary" and the observation that "A teacher new to a year level would need to consider A.S [achievement standards] from years above and below to understand the differences and more fully understand the year level in question".

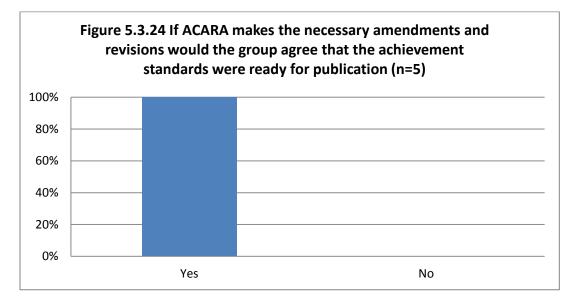


Science: Coherence

The table above indicates that the coherence of the revised science achievement standards is clearly evident – both across the years and the order in which skills and understandings are presented.

It can be seen that the level of agreement by all science participants in the validation workshop substantially increased in all areas of fidelity, clarity, pitch, usability, sequence and coherence. Minor revisions were noted from feedback provided by participants. It is evident in the findings that the issues noted by ACARA through the validation process have been addressed in the revisions made, and the findings from the second validation workshop clearly articulate this.

Finally, respondents were asked, if ACARA made the necessary amendments and revisions outlined by the group, would the group agree that the achievement standards were ready for publication. As the table below presents, all participants agreed that, following minor revisions, the science achievement standards were ready for publication.



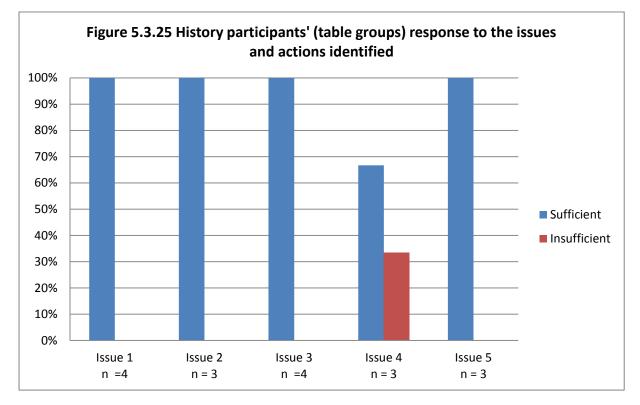
History

There was positive feedback from the participants in the history workshop, with the majority agreeing that the issues and actions in response taken by ACARA were the correct ones, as outlined in the table and comments below.

"Yes – from our discussions last time we are pleased to see that there has been efforts made to make it clearer between the skills and understanding. Happy to see language issues being addressed – for example some, appropriate, simple"

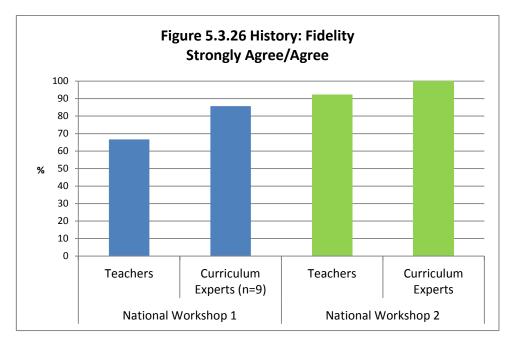
"Good summary of the main areas... Acknowledged the age / sequencing issues."

"It is affirming to see that ACARA has acknowledged the issues that were raised in the June workshop ... A general acceptance of the broad principles that have been identified for substantive revision and clarification."



Participant responses to the fidelity, clarity, pitch, usability, sequence and coherence of the revised history achievement standards at the second national validation workshop held on 29 August 2011 are presented in further detail below.

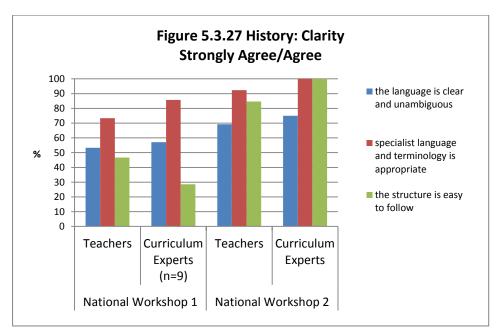
History: Fidelity



As shown in the table above, participants in the history workshop agreed that there was a marked improvement in the revised achievement standards in better representing the skills and understanding of the curriculum.

"Much improved :)"

"The AS is a very easy to follow and understand. Any Foundation teacher should be able to read this standard and understand what learning is expected at this level."

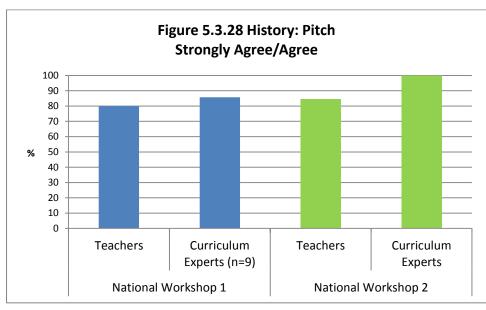


History: Clarity

All three areas of clarity saw a marked improvement from both teachers and curriculum experts. Participants particularly found the glossary of verbs assisted in the validation of achievement standards:

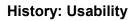
"Much 'slicker'. The companion of the glossary of verbs works beautifully. Love my verbs!!"

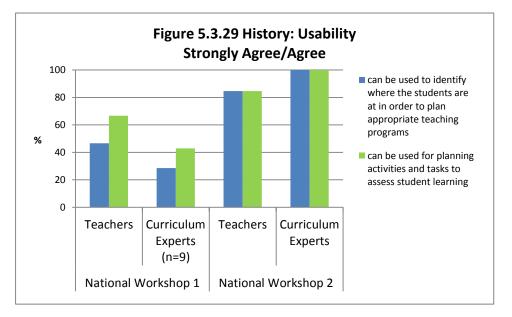
"The glossary makes question 10 easy to answer. The glossary is brilliant!"



History: Pitch

Although the pitch of the achievement standards was not considered an issue from the first validation workshop, the minor revisions made continued to increase participants' confidence in this area. Participant feedback indicated that they could "see the progression between year levels" with some minor refinements needed to "take in mind teachers who are not history experts - they will have difficulty in absorbing content, understanding + skills".



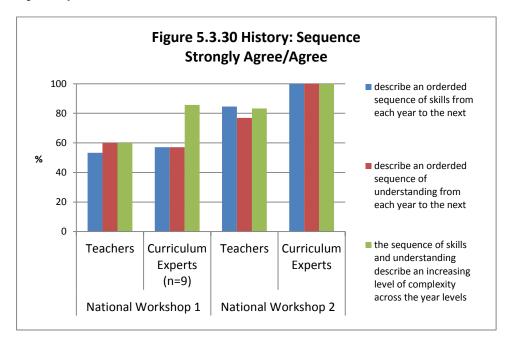


The table above shows a substantial increase in agreement by teachers and curriculum experts that the revised history achievement standards can be used to identify and plan teaching programs and for planning activities and tasks to assess

student learning. This is further noted in the comments made by some participants below.

"You can now certainly see what skills and understandings students should have at specific years of schooling."

"In theory they provide good structure to create plans, however trialling in classrooms will make this clearer."



History: Sequence

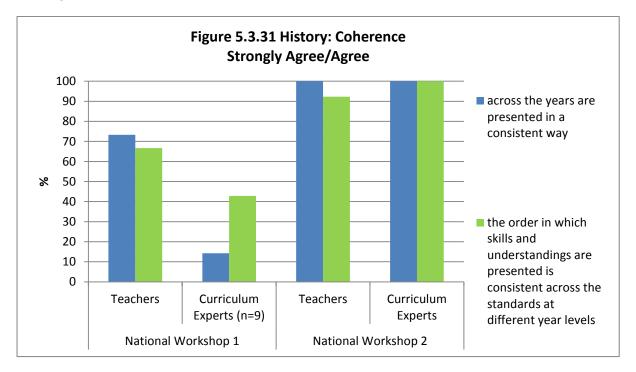
It is noted in the graph above that there was 100% agreement from all curriculum experts across all three areas of sequence of skills, understandings and level of complexity. There was also a substantial increase in agreement by teachers in all three areas, with feedback indicating minor revisions to be made to the achievement standards.

"Need clarification of verbs especially in relation to sequencing."

"It is very important to know what skills and understandings are being built on from one year to the next. They shouldn't be seen in isolation."

"The intention is there but perhaps should be more apparent."

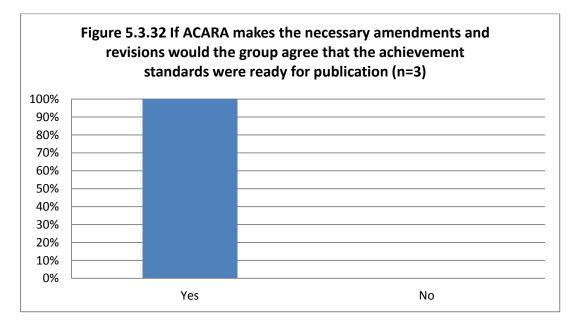
History: Coherence



As the table above suggests, teachers and curriculum experts agree that the way the revised history achievement standards are presented both across the years and the order in which skills and understandings appear, are consistent and coherent.

"A teacher working across years could apply these standards (understandings) A huge win!!"

Finally history participants were asked, if ACARA makes the necessary amendments and revisions outlined by the group, would the group agree that the achievement standards were ready for publication. As the table below shows, with minor revisions, all participants agreed that the Foundation to Year 10 history achievement standards were ready for publication.



6. Conclusions

The revised version of the achievement standards for English, mathematics, science and history presented to teachers and curriculum experts at the second national validation workshop on 29 August 2011 was a marked improvement on the version that had been presented on 16 June 2011 and the version that was used by states and territories for their validation activity.

There was improvement in the sequence, pitch, clarity, coherence and usability of the Foundation to Year 10 achievement standards. Minor revisions have taken place to address further feedback raised by participants, and it was confirmed with participants at the workshop that, once this feedback had been addressed, they would be happy to endorse these achievement standards for publication.

This final confirmation by teacher and curriculum expert representatives was a culmination of activity described in this Report throughout July and August 2011 providing feedback that informed the revision to the achievement standards. This activity included:

- A national validation workshop of teachers and curriculum experts on 16-17 June 2011
- State and territory workshops during July and early August 2011
- ACARA's Assessment Group review of mathematics and English using the NAPLAN Scales
- ACER's systematic linguistic and cognitive audit of the Australian Curriculum: English, mathematics, science and history achievement standards
- Meetings with state and territory education authorities on initial draft revised achievement standards
- A second national validation workshop of teachers and curriculum experts on 29 August 2011.

Following endorsement by SCSEEC, the revised achievement standards will be published on the Australian Curriculum website (as v2.0 of the Australian Curriculum) and will be available for use by classroom teachers from 2012.

There has been, however, significant discussion about whether full use of the achievement standards over the next year or two for planning, teaching, assessing and reporting might generate additional feedback. This discussion then poses the question of whether ACARA would be prepared to respond to any issues that arise in the first year or two of implementation of the curriculum.

The extent to which the achievement standards will be used in 2012 will vary between states and territories depending on their implementation plans. In some jurisdictions, schools will be expected to teach some or all of the Australian Curriculum for English, mathematics, science and history; in other jurisdictions, there will be some form of trialling, piloting or familiarisation activity.

Quality curriculum development practice involves a systematic approach to monitoring the use of a newly developed curriculum in the first two years of implementation, followed by ongoing monitoring and evaluation. This is standard practice in many Australian states and territories for senior secondary curriculum development, but not necessarily for primary and lower secondary curriculum development.

Based on quality practice in Australia and internationally, ACARA anticipates that it would quite reasonably work with states and territories to monitor and collect data on the curriculum during 2012 and provide advice to Ministers on any issues that arise, along with proposed responses. This would occur in parallel with ACARA's building of the student work sample collection and activities to investigate options for greater consistency in reporting to parents (which have been discussed in previous advice to the Ministerial Council).

7. Appendices



Appendix 1

Date		Development and consultation	Endorsement activities
February		 Review by ACARA of current position and state and territory concerns about achievement standards; preparation of draft advice Invitation to AEEYSOC, NCEC, ISCA and DEEWR to nominate participants to attend a national meeting and provide advice on nationally consistent approaches 	
March	22	National meeting to discuss F-10 achievement standards, nationally consistent approaches to reporting on student achievement, and validation of achievement standards	
March	27	ACARA and Directors of Curriculum meeting; invitation to be involved in validation activities at a national and state/territory level	
April-May		ACARA liaises with state and territory school authorities re validation activities involving schools and teachers	
April	13		ACARA Curriculum Committee reviews advice on achievement standards and nationally consistent approaches to reporting
May	9–10	National teleconference(s) to discuss final advice on achievement standards and nationally consistent approaches to reporting, and detailed process for validation of achievement standards	
May	18		ACARA Board considers advice on achievement standards and nationally consistent approaches to reporting, and process for validation of achievement standards
May	26	Validation planning workshop with state and territory curriculum experts in each learning area	



Date		Development and consultation	Endorsement activities
May	27	ACARA and Directors of Curriculum meeting; review of progress with validation process	
June	10		AEEYSOC provides feedback on achievement standards and nationally consistent approaches to reporting
June	16		ACARA Board considers advice on achievement standards and nationally consistent approaches to reporting
June	16–17	ACARA-coordinated central validation activity involving 32 teachers and curriculum experts in each learning area (representative of each state/territory)	
June	20-28	 National workshop data reviewed, catalogued and interrogated by LA SPOs Final report structure confirmed Data ontry boging 	
July	1-29	 Data entry begins Validation activities coordinated by state and territory jurisdictions with teachers in schools, and with curriculum and assessment experts South Australia – by 19/7/2011 Tasmania – by 22/7/2011 ACT – by 25/7/2011 Queensland – by 25/7/2011 Victoria – by 29/7/2011 Western Australia – 29/7/2011 New South Wales – by 2/8/2011 Northern Territory – 2/8/2011 	
July	1-29	 Weekly meetings of ACACA personnel to review progress and work through issues Data entry and analysis of national validation workshop data Data entry and analysis of jurisdictional validation data Refinement and revision of achievement standards by SPOs 	



Date		Development and consultation	Endorsement activities
July	8		Ministerial Council considers advice on achievement standards and nationally consistent approaches to reporting
July	25	Assessment group provides report on standardised assessment audit (Activity 2)	
July	25	ACER provides report to ACARA on linguistic and conceptual audit (Activity 3)	
August	4-12	 Consideration of assessment and ACER reports in review of achievement standards First drafts of revised achievement standards produced for review by ACARA personnel Preparation of draft report on validation of F-10 achievement standards and refinements to F-10 English, mathematics, science and history curriculum standards for consideration by executive 	
August	8-17	Jurisdictional review (checking out) of findings from validation, including refinement of curriculum content and achievement standards	
August	8-11	 Invitation sent to participants for national validation workshop 29th August with online registration Program confirmed and activities and distributed to participants Quantitative and qualitative reports due for learning area SPOs to interrogate Discussions with ESA about v2.0 release of the Foundation to Year 10 Australian Curriculum 	



Date		Development and consultation	Endorsement activities
August	11	 Assessment and Reporting meeting: analysis of feedback and responses from national and state/territory workshops identification of common and individual state/territory issues; and actions taken in responding to feedback received 	Progress report to ACARA Board. Progress report to be distributed one week prior, on 11 th August
August	12	ACARA and Directors of Curriculum meeting; reviews report from validation activities	
August	15-28	Draft validation report circulated to ACARA validation team for consideration and review	
August	18		ACARA Board meeting reviews advice on validation of achievement standards and refinement of curriculum content and achievement standards
August	19-28		ACARA meeting with school and curriculum authorities to discuss revised achievement standards: New South Wales - 22/8/11 Queensland - 23/8/11 South Australia - 24/8/11 Victoria - 25/8/11 ACT - 26/8/11 Northern Territory - 29/8/11 Tasmania - 31/8/11 Western Australia - 8/9/11
August	24	 Distribute pre-reading to national validation workshop participants Finalise running sheet for national validation workshop 	
August	24-26	Finalise national validation workshop logistics and materials Collate and print workshop materials Revision of program and activities with learning SPOs	



Date		Development and consultation	Endorsement activities
August	29	National validation workshop (return meeting of teachers) to review and affirm actions taken in response to feedback from June workshop	
August	30-31	 SPOs review feedback from national workshop and further revise achievement standards as necessary. Feedback to be incorporated into final report Final report prepared 	
September	1-30	 Ongoing liaison and work between ACARA and ESA personnel in preparing v2.0 release of the Foundation to Year 10 Australian Curriculum Preparation of communication and media strategy and information materials for v2.0 release Development of additional annotated work samples (high, medium, low) in relation to the revised achievement standards 	
September	2		Final report including revised achievement standards distributed to ACARA Board
September	9		ACARA Board meeting – advice on validation of achievement standards and refinement of curriculum content and achievement standards for submission to the Ministerial Council
September	10-16	Final refinements, edits of achievement standards and curriculum content	Final jurisdictional meetings if required
September	30		AEEYSOC meeting (papers despatched by 16 September) – advice on validation of achievement standards and refinement of curriculum content and achievement standards



Date		Development and consultation	Endorsement activities
October	14		Ministerial Council meeting (papers despatched by 23 September) – advice on validation of achievement standards and refinement of curriculum content and achievement standards
October	17-21	Release of v2.0 Foundation to Year 10 Australian Curriculum with revised achievement standards	
October - November		Development of additional annotated work samples (high, medium, low) in relation to the revised achievement standards	
December		Publication of additional annotated work samples on the Australian curriculum website	



NATURE OF ACHIEVEMENT STANDARDS

What are achievement standards?

- The achievement standards describe what students are typically able to understand and able to do. They describe expected achievement.
- Across F-10, the set of achievement standards describe a broad sequence of expected learning. This sequence provides teachers with a framework of growth and development in each of the learning areas.
- Achievement standards emphasise the depth of conceptual understanding, the sophistication of skills and the ability to apply essential knowledge expected of students.
- Achievement standards will be accompanied by sets of annotated student work samples, as support material illustrating the achievement standard.

How should achievement standards be viewed?

- The content descriptions and achievement standards are not independent they should be read together.
- The achievement standard at each year level should be read as a whole (the understanding and skills elements should be read together).
- When viewing the sequence of achievement standards for a learning area, look at the broad development of conceptual understandings and skills (read them holistically, not in a segmented way).

How will achievement standards be used in the context of assessment and reporting?

- Teachers will use a range of different assessment strategies to ascertain what each student has learnt (actual achievement) and will make judgments about the extent and quality of each student's achievement in relation to the Australian Curriculum achievement standards.
- Reporting to parents will provide information about a student's actual achievement against the achievement standards. The use of Australian Curriculum achievement standards as a common reference point for reporting to parents will contribute to national consistency in reporting.
- Individual school authorities will have specific assessment and reporting requirements that schools and/or teachers will need to meet.
- Current Commonwealth requirements for reporting to parents include the requirement for student achievement to be reported in terms of A-E grades (or an equivalent 5-point scale).
- Education authorities and individual schools are able to determine, in consultation with parents and communities, the style and format of reporting that best meets local needs and circumstances, including provision of any additional elements of student reports. This might include written comments about the quality of learning demonstrated by the student; indicators of student effort, engagement, behaviour and improvement; student self-assessment; and future learning goals.
- As the Australian Curriculum is being implemented during 2012 and 2013, ACARA will work with the states and territories and the Australian Government to investigate ways that may strengthen national consistency in reporting of student learning.



Appendix 3

Activity 5A: Validation of F-10 Achievement Standards Survey

The purpose of this survey is to gauge the efficacy of the Foundation to Year 10 achievement standards for English, mathematics, science and history in terms of their clarity, pitch, usability, sequence and coherence.

Feedback is sought in relation to the extent to which the achievement standards:

- for each year level are aligned with the content and are appropriate for that year group
- are represented in a coherent hierarchy of increasing complexity in terms of understanding and skills
- assist classroom teachers with planning for and assessing (formative and summative) student learning

Please provide a rating for all questions. If you disagree with a statement please provide specific reasons in the comment box provided and outline any specific amendments or revisions that you believe are necessary. Record the statement number that you are referring to in the comment box.

Please note:

When examining the achievement standards, consider the following:

- 1. It is important that the achievement standard at each year level is read as a whole (i.e. the understanding and skills are read together).
- 2. When viewing the sequence of achievement standards for a learning area, look at the broad development of conceptual understandings and skills (read them holistically, not in an atomized way).
- 3. When the achievement standards are read together with the content descriptions, the level of achievement expected of students for each standard is clearer.

Thank you for your valuable feedback.



Section One: Background Information

Q1. Please indicate which State or Territory you are based in:

Q2. Please indicate which category best describes your perspective. (single choice)

Primary Teacher	
Secondary teacher	
Education authority officer	
Curriculum expert	
If other, please specify	

Q3. Please indicate which category best describes your affiliation. (Single Choice)

Government school
Independent school
Catholic school
Professional association
University faculty
School or curriculum authority
Community organisation
If other, please specify

Q4. Please indicate which learning area your responses relate to. (single Choice)

English	 	
Mathematics	 	

Science	
History	

Q5. Please indicate which year level your responses relate to. (single choice)

Foundation	Year 6	
Year 1	Year 7	
Year 2	Year 8	
Year 3	Year 9	
Year 4	Year 10	
Year 5		

F-10 Achievement Standards Validation Report: Appendix 3



If you have identified yourself as a teacher, please answer the following two questions:

Q6. Have you used the achievement standards in the classroom to plan for teaching and learning?

Yes	5																
		 	 	 						 	 			 	 		۰.

No

Q7. Have you used the achievement standards in the classroom to assess student learning? (formative or summative)

Yes

No



Section Two: Achievement Standards - Clarity

Think about the achievement standard that refers to the learning area and year group you selected at the beginning of this survey.

To what extent do you agree or disagree with each of the following statements about the achievement standard?

Q8. The achievement standard represents the essential skills and understandings of the curriculum content for the year level.

Strongly Agree	Agree	Disagree	Strongly Disagree
		Ū.	
Q9. The language of the			
That is, from reading the understand and do.	he standards it is c	lear what students a	re expected to
Strongly Agree	Agree	Disagree	Strongly Disagree
Q10. Any specialist lar			
to teachers of the year year level should be fa			
year lever should be la	inniar with the spe	cialist language used	r in the standard).
Strongly Agree	Agree	Disagree	Strongly Disagree
Q11. The structure of t	the achievement st	andard is easy to foll	low.
Strongly Agree	Agree	Disagree	Strongly Disagree
		Ū.	
Comments:			



Section Three: Achievement Standards - Pitch

Think about the achievement standard that refers to the learning area and year group you selected at the beginning of this survey.

To what extent do you agree or disagree with each of the following statements about the achievement standard?

Q12. The skills and understanding described by the achievement standard are pitched appropriately for the year group.

Strongly Agree	Agree	Disagree	Strongly Disagree
Comments:			
comments.			



Section Four: Achievement Standards - Usability

Think about the achievement standard that refers to the learning area and year group you selected at the beginning of this survey.

To what extent do you agree or disagree with each of the following statements about the achievement standard?

Q13. The achievement standards can be used in conjunction with the content descriptions to identify where students are at in order to plan appropriate teaching programs.

Strongly Agree	Agree	Disagree	Strongly Disagree
Q14. The achievement		-	
descriptions for plannii	ng activities and to	asks to assess student	learning.
Strongly Agree	Agree	Disagree	Strongly Disagree
0, 0	9	0	0, 0
Comments:			



Section Five: Achievement Standards - Sequencing

Think about the achievement standards that refer to the learning area and (where possible) span the range from two years below to two years above the year group (inclusive) you selected at the beginning of this survey.

To what extent do you agree or disagree with each of the following statements about the achievement standards?

Q15. The achievement standards describe an ordered sequence of **skills** from each year to the next.

Strongly Agree	Agree	Disagree	Strongly Disagree
Q16. The achievement from each year to the		e an ordered sequen	ce of understanding
Strongly Agree	Agree	Disagree	Strongly Disagree
Q17. The sequence of complexity across the		anding describe an in	creasing level of
	your lovolo.		
Strongly Agree	Agree	Disagree	Strongly Disagree
019 The cognitive de	mand at each year	loval (danth of undar	standing and
Q18. The cognitive de sophistication of skills		· · · · · · · · · · · · · · · · · · ·	•
needing to read) the y			
Strongly Agree	Agree	Disagree	Strongly Disagree
Comments:			



Section Six: Achievement Standards - Coherence

Think about the achievement standards that refer to the learning area and (where possible) span the range from two years below to two years above the year group (inclusive) you selected at the beginning of this survey.

To what extent do you agree or disagree with each of the following statements about the achievement standards?

Q19. The achievement standards across the years are presented in a consistent way.

Strongly Agree	Agree	Disagree	Strongly Disagree						
Q20. The order in which skills and understanding are presented is consistent across achievement standards at the different year levels.									
Strongly Agree	Agree	Disagree	Strongly Disagree						
Comments:									



Section Seven: Achievement Standards - Coherence

Think about the achievement standards across <u>two or more learning areas</u> at the year group you have selected. Identify which of the two or more learning areas your next set of responses are referring to:

English	
Mathematics	
Science	
History	



To what extent do you agree or disagree with each of the following statements about the achievement standards?

Q21. The structure of the achievement standards is consistent across the learning areas.

Strongly Agree	Agree	Disagree	Strongly Disagree

Q22. The level of explicit and/or implicit cognitive demand is consistent across the learning areas (that is, students are not expected to demonstrate levels of cognition in one learning area that differ greatly to those expected in another).

Strongly Agree	Agree	Disagree	Strongly Disagree
Comments:			

Thank You

We appreciate you taking the time to complete ACARA's questionnaire on the Foundation to Year 10 achievement standards for English, mathematics, science and history.

Please subscribe to the ACARA Update newsletter to keep abreast of key consultation dates and activities. To subscribe, please visit our website: www.acara.edu.au

Thank you for your valuable feedback.

The Australian Curriculum, Assessment and Reporting Authority (ACARA) Level 10, 255 Pitt Street Sydney NSW 2000 Phone: 1300 895 563 Email: info@acara.edu.au