Science K–10
(incorporating Science and Technology K–6)
Draft Syllabus Version 2

Consultation Report

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1 Background

The Board of Studies began its syllabus development process for K–10 Science following state and territory education ministers' endorsement of the Australian curriculum content descriptions for Foundation (Kindergarten in NSW) to Year 10 English, Mathematics, Science and History in December 2010.

The *Science K–10 (incorporating Science and Technology K–6) Draft Syllabus* [referred to as *Science K–10 Draft Syllabus Version 2*] includes the agreed Australian curriculum content and achievement standards.

In Terms 2 and 3 of 2011, the Board of Studies conducted widespread consultation to engage stakeholders and to seek their feedback on the draft syllabus. Feedback was gathered through teacher meetings, a Board Curriculum Committee meeting, an online survey and written submissions from individuals, groups and organisations. A consultation report containing a summary of findings is published on the Board of Studies website.

The key matters emerging from consultation in 2011 were the focus of revisions to the draft syllabus. These key matters and the actions taken to resolve them are included below. The revision work resulted in a second version of the draft syllabus, which was released for a new round of consultation in 2012. The *Science K–10 Draft Syllabus Version 2* was presented in an online interactive format for the first time. The scope of the consultation activities is included in section 2 of this report.

The *Science K–10 Draft Syllabus Version 2* represents the following key changes:

- the rationales more succinctly describe the place and purpose of science and technology in the curriculum
- the values and attitudes statements have been placed before the skills, knowledge and understanding in the aims, objectives and outcomes
- the objectives have been reworded to make them more succinct
- the coding of outcomes has been reviewed for consistency across Phase 1 syllabus.
- the number of K–6 knowledge and understanding outcomes has been increased to improve their clarity and intent
- a diagram has been included in the K–6 and Years 7–10 Organisation of content section to clarify the syllabus content structure
- the knowledge and understanding content has been revised to clarify scope, depth and cognitive demand, and flexibility to address this content has been increased
- the scope to address the content relating to knowledge and understanding of and about science has been clarified and broadened
- the purpose of the learning across the curriculum content has been clarified to ensure consistency across syllabuses
- in Life Skills the number of outcomes has been increased, improving clarity and specificity. The content has been revised
- the stage statements have been revised to provide a more succinct summary of what students should know and be able to do by the end of a stage. The stage statements include the Australian curriculum achievement standards

- advice on assessment and reporting has been included at the end of the Science and Technology K–6 section of the syllabus
- the Australian curriculum content descriptions have been coded.

2 Consultation Round 2

Consultation on the *Science K–10 Draft Syllabus Version 2* was conducted from 13 February to 30 April 2012.

The consultation program consisted of:

- a Board Curriculum Committee consultation meeting on 26 March
- afternoon consultation meetings in:
  - Lismore on 6 March
  - Silverwater on 8 March
  - Orange on 13 March
  - Albury on 15 March
  - Baulkham Hills on 19 March
- special education focus group meetings in:
  - Sydney (at the Board of Studies) on 9 March
  - North Rocks on 14 March
- Kindergarten to Year 6 focus group meetings in:
  - Armidale on 1 March
  - Ryde on 20 March
- an online survey on the Board of Studies website for the period 13 February to 30 April 2012 which was completed by 74 respondents.

Professional associations and schooling sectors conducted a range of activities during the consultation period to inform feedback to the Board. Various organisations and some individual respondents provided their feedback in written submissions rather than online survey responses.

3 Summary of respondents

Consultation meetings

One Board Curriculum Committee (BCC) meeting, five K–10 teacher meetings, two targeted K–6 teacher focus groups meetings and two special education meetings.

BCC members	15	K–10 teachers	199	K–6 teachers	22
Special education	31				

Online survey respondents

74 online survey responses

Years of schooling

Kindergarten to Year 6	14	Years 7 to 10	60

Sector

Catholic	4	Government	32	Independent	28
Non-school based	2	Parent body	0	University	0

Area of NSW

Metropolitan	46	Regional	20

Number of people contributing to the response

1	46	2–4	7	5 or more	13

4 Executive summary

The *Science K–10 Draft Syllabus Version 2 Consultation Report* provides a description of the consultation process and a summary and analysis of the feedback received. The summary confirms the general directions of the draft syllabus as well as key matters raised and the amendments that have been made in response.

The consultation report presents data and findings gathered through 74 survey responses, 16 written submissions, a Board Curriculum Committee (BCC) consultation meeting and 9 consultation meetings.

Overall feedback on the *Science K–10 Draft Syllabus Version 2* was positive. Respondents agreed that the revised outcomes were clear and that there was increased flexibility to deliver the knowledge and understanding content.

Throughout the Round 2 consultation process, there was recognition that the majority of key matters identified in 2011 had been addressed in the *Science K–10 Draft Syllabus Version 2*. However, feedback indicated a preference for coding of content in the Science syllabus.

The following table provides a summary of the key matters raised in the second round of consultation and the actions taken to address them.

Key matters raised	**Actions**
Rationale	
The processes of Working Technologically need to be strengthened and the scope of technology should be broadened in the K–6 rationale.	The rationale has been reviewed to strengthen the processes of Working Technologically and broaden the scope of technology.
The importance of honesty in applying the processes of scientific inquiry needs to be strengthened throughout the syllabus.	The emphasis on honesty in applying the processes of scientific inquiry has been strengthened in the Working Scientifically content in all stages.
Outcomes K–10	
The coding of knowledge and understanding outcomes could be improved to more clearly show the relationship to the K–6 substrands and 7–10 strands.	The K–6 and Years 7–10 knowledge and understanding objectives have been reworded. The coding of the K–10 knowledge and understanding outcomes has been revised to more clearly express the continuum between the K–6 substrands and the Years 7–10 strands.
The cognitive demand and range of key words in the outcomes within a stage and the progression across stages should be reviewed for consistency with the level of content.	The range of key words in the outcomes within and across stages has been reviewed and amendments made in relation to the cognitive demand of the associated skills, knowledge and understanding content.

Key matters raised	Actions
Content K–10 **Organisation** The diagrams need to show more clearly the relationship between the strands and include 'context' to emphasis its importance.	The K–6 and Years 7–10 diagrams have been revised to clarify the relationship to context and between the strands/substrands of the syllabus.
The wording of the section on the Organisation of content needs to clarify some details in relation to syllabus requirements.	The wording of the Organisation of content has been revised to make explicit syllabus requirements.
Content K–10 In the Knowledge and Understanding strands/ substrands, the relationship between the content statements summarising the overarching scientific and/or technological ideas, and the related knowledge content is unclear and requires clarification.	The text in the Organisation of content has been revised to clarify this relationship.
The clarity, scope and depth of some content need further refinement.	The wording of some content has been refined to improve clarity and intent.
It would be helpful to teachers if the skills, knowledge and understanding content were coded.	Coding of the skills, knowledge and understanding content has been included in Years 7–10 to show the relationship to the strands. In addition, an online interactive programming tool that will assist teachers to select and organise content for teaching and learning programs is under development.
Years 7–10 Life Skills The level of some outcomes and the wording of some content may not be able to be accessed by some students with significant disabilities.	The outcomes and content have been reviewed to provide appropriate access for the range of students with special needs undertaking Life Skills, including those with more significant disabilities.
Continuum of learning The placement of the stage statements needs to be reviewed and included in the print version of the K–6 Science and Technology syllabus.	In the print document the stage statements have been located with the K–6 outcomes. In the online syllabus the placement of syllabus components is of less relevance as users can easily navigate between sections.

5 Analysis

5.1 Rationale

Summary

Feedback at consultation meetings and via the online survey indicated strong support for the K–6 and Years 7–10 rationales. The rationales were described as evidence-based and succinct, providing a clear description of the place and purpose of science and technology in the curriculum.

Working Technologically was identified as an area that could be strengthened in the K–6 rationale. The inclusion of a reference to 'honesty' in applying the processes of Working Scientifically in the rationales was supported, but was identified as needing greater emphasis throughout the syllabus. Other suggestions for revision were specific and have been addressed as indicated in the actions during the final amendments to the syllabus.

Feedback affirming the rationale

Feedback	Sources
The rationale:	
• describes the distinctive nature of science, and the place and purpose of science in the curriculum	BCC CEOCG Baulkham Hills (CM)
• is succinct, evidence-based and provides a clear overview of the syllabus	Lismore (CM) Silverwater (CM)
• reinforces life-long learning	Lismore (CM)
• for Years 7–10 builds on the rationale for K–6 in a meaningful and purposeful way	CEOCG
• illustrates an effective mix of science and technical skill.	Submission 5

Matters raised and actions

Matters raised	Sources	Actions
K–10		
The importance of honesty in applying the processes of scientific inquiry needs to be strengthened throughout the syllabus.	Lismore (CM)	The emphasis on honesty in applying the processes of scientific inquiry has been strengthened in the Working Scientifically content in all stages.
Some wording and terms in the rationales may require clarification.	Silverwater (CM) Submission 2	The K–6 and Years 7–10 rationales have been reviewed to clarify wording, and some additional terms included in the glossary.
The rationale does not recognise or acknowledge other religious and cultural paradigms of understanding.	AIS	The purpose of the rationale is to describe the distinctive nature of science and its relationship to the contemporary world and current

Matters raised	Sources	Actions
		practice.
K–6 The text relating to Working Technologically could be strengthened and the scope of technology broadened.	Lismore (CM) Silverwater (CM) DEC	The rationale has been revised to strengthen the processes of Working Technologically and broaden the scope of technology.
Science as a Human Endeavour could be more explicit and have greater emphasis.	Lismore (CM) CECPD CEOCG STANSW Submission 4	The emphasis of the Australian curriculum strand Science as a Human Endeavour in K–6 is explicit in the rationale, outcomes, content and stage statements of the syllabus.
Years 7–10 There should be greater emphasis on scientific inquiry in the syllabus.	Baulkham Hills (CM) Submission 4	The rationale, aim, objectives, outcomes and content are explicit in identifying the centrality of scientific inquiry.

5.2 The place of the *Science K–10 Syllabus* in the K–12 curriculum

Summary

There were no matters raised during the consultation period in survey responses, written submissions, at the Board Curriculum Committee meeting or consultation meetings in relation to this aspect of the syllabus.

5.3 Aim

Summary

Consultation feedback generally affirmed the Science and Technology K–6 and Science 7–10 aims. There were no matters raised in relation to the K–6 aim. In Years 7–10, the clarity of the link between the aim and objectives was identified as an aspect for review. Some clarification of wording was suggested.

Feedback affirming the aim

Feedback	Sources
The aims are succinct, clear and appropriate.	BCC AIS CEOW IEU Silverwater (CM) Survey x 1
The aims are realistic and inquiry-based.	Lismore (CM)
The reference in the aim to 'foster students' sense of wonder and expand their natural curiosity about the world …' is welcomed.	Survey x 1
There are meaningful links between science and technology in the K–6 rationale and aim.	CEOCG

Matters raised and actions

Matters raised	Sources	Actions
K–10		
Scientific literacy is not evident in the aim.	STANSW	The capabilities of scientific literacy are included in Science and Technology K–6 and Science 7–10 rationales, and are embedded in the outcomes and content.
Years 7–10		
The relationship between the aim and objectives could be clearer.	Lismore (CM)	The relationship between the aim and the objectives has been reviewed. The intent of the aim is more effectively embedded in the scope of the objectives.
Some terms and wording in the aim could be clarified.	Survey x 4	The wording of the aim has been reviewed and some additional terms included in the glossary.

5.4 Objectives

Summary

Although few comments were received on the objectives, there was agreement that the objectives define the values, attitudes, skills, knowledge and understanding to be developed through study in K–10 Science. The scope of the K–6 knowledge and understanding objectives and the relationship between the Years 7–10 objectives and the aim were areas raised for review.

Feedback affirming the objectives

Feedback	Sources
The objectives are broad, but appropriate. They reflect the aim of the syllabus.	Lismore (CM) Silverwater (CM)

Matters raised and actions

Matters raised	Sources	Actions
K–6 The scope and intent of the knowledge and understanding objectives are unclear.	CEOSYD	The wording of these objectives has been revised to clarify the scope and intent.
Years 7–10 The link between the aim and objectives could be clearer.	Lismore (CM)	There have been modifications to objectives to clarify their intent.
The position of skills needs to be reordered in the objectives headings to be consistent with the ordering of the outcomes and content in the syllabus.	Baulkham Hills (CM)	The wording of the objectives headings has been reviewed to be consistent with the placement of skills in the syllabus.

5.5 Outcomes

Summary

Feedback confirmed the K–6 outcomes as clear and providing specific direction for teaching, learning and assessing. Survey responses and consultation meeting comments indicated that the Years 7–10 outcomes clearly identify the skills, knowledge and understanding to be developed and are of an appropriate level of cognitive demand.

Consultation feedback indicated that the relationship between the knowledge and understanding objectives and outcomes should be strengthened, together with coding of the knowledge and understanding outcomes to more clearly relate to syllabus content strands in Years 7–10 and substrands in K–6. Some feedback noted that the level of cognitive demand of the key words in the outcomes within some stages and across K–10 should be reviewed. The continuum of learning in the K–6 outcomes for Working Scientifically and Working Technologically were identified as requiring clarification.

Feedback affirming the outcomes

Feedback	Sources
The outcomes are clear and relate to the content.	Orange (CM) Silverwater (CM) AIS IEU
The outcomes are well set out with an appropriate balance between knowledge, understanding and skills.	Albury (CM) Baulkham Hills (CM) Survey x 2 Submission 2
The values and attitudes outcomes are appropriate and their placement first in the objectives and outcomes is supported.	BCC Albury (CM) Orange (CM) Submission 5
The Working Scientifically outcomes are appropriate, well written and cover investigation well.	BCC Albury (CM) Lismore (CM) Survey x 1
The outcomes are at an appropriate level of cognitive demand and show a clear continuum of learning.	Baulkham Hills (CM) Silverwater (CM)
The skills outcomes are well written and allow for a clear progression between the stages.	AIS
The embedding of knowledge and understanding of and about the nature, development, uses and implications of science is evident in the outcomes.	BCC Lismore (CM) Silverwater (CM)

Matters raised and actions

Matters raised	Sources	Actions
K–10		
The relationship between the Knowledge and Understanding strands/substrands in the objectives and the outcomes could be improved.	BCC Albury (CM) Baulkham Hills (CM) CEOCG	The relationship between the Knowledge and Understanding strands/substrands in the objectives has been strengthened.
The method of coding the knowledge and understanding outcomes in relation to the K–6 substrands and the Years 7–10 strands is unclear and requires review and explanation.	CEOSYD CEOCG	The coding of knowledge and understanding outcomes has been revised to clearly relate to the syllabus strands/substrands. An explanation of the coding has also been provided.
The cognitive demand and range of key words in the outcomes within a stage and the progression across stages should be reviewed, for consistency with the level of content.	BCC Albury (CM) Silverwater (CM) CEOSYD CEOW TF STANSW Survey x 1	The cognitive level of key words of the outcomes have been revised and amended for consistency with the content in relation to: • the cognitive level in the content • the cognitive demand of the associated skill, knowledge and understanding content.
The knowledge and understanding about the nature, development, use and influence of science needs to be given greater emphasis.	STANSW Submission 4	The understanding about science is explicit in the K–10 knowledge and understanding outcomes and content. There is scope in the selection of contexts for teachers to enhance the aspects of the nature, development, use and influence of science.
A statement is required to clarify the status of the outcomes and their relationship to the Australian curriculum content.	Albury (CM) Baulkham Hills (CM)	The initial support materials that will accompany the release of the new K–10 syllabuses will describe the various aspects of the syllabuses.
The syllabus outcomes and content do not provide scope to cater for the needs of gifted and talented students.	TF Submission 1	Advice has been added to all syllabuses about supporting the learning needs of gifted and talented students.
K–6		
The outcomes for Working Scientifically and Working Technologically are broad and the progression requires clarification.	Baulkham Hills (CM) Orange (CM) Albury (CM) Ryde (K–6 CM) CECPD	The progression in the Working Scientifically and Working Technologically outcomes has been reviewed and clarified.
There are possibly too many outcomes to address in the suggested time allocation.	BCC DEC Albury (CM) Silverwater (CM) Survey x 1	The increased number of outcomes in the version 2 draft syllabus provides clearer, more accessible outcomes.

Matters raised	**Sources**	**Actions**
Some of the outcomes are quite wordy and require a considerable amount of deconstruction.	AIS	The wording of the outcomes has been reviewed to enhance clarity and specificity. The content provides further clarification of the scope and depth intended.
Years 7–10		
The wording of some outcomes requires review to clarify the scope, depth and progression.	Albury (CM) Silverwater (CM) AIS Survey x 1	The wording of the outcomes has been reviewed to enhance clarity, specificity and progression.
The term 'hypothesis' should be included in Working Scientifically in the Stage 4 outcomes.	Lismore (CM) Baulkham Hills (CM)	The inclusion of 'hypothesis' aligns with its placement in Stage 5 of the Australian curriculum content descriptions.

5.6 Content

Summary

Consultation meeting feedback indicated that the Organisation of content section provided a clear overview of the syllabus structure. The inclusion of the K–6 diagram was viewed positively. However, feedback identified that the K–6 and 7–10 diagrams needed to be refined to more clearly capture the importance of contexts and the relationships between the strands. There was significant comment on the need for advice, support materials and professional development in developing teaching, learning and assessment programs.

The relationship between the content statement summarising the overarching scientific and/or technological ideas and the related knowledge content was identified as requiring clarification. The increased flexibility provided by removing the requirement to retain the content in blocks was supported. However, consultation advice was consistent in noting that with this increase in flexibility it was essential for the relationships between the outcomes and content to be explicit. Feedback from consultation meetings, the Board Curriculum Committee meeting and surveys strongly recommended the coding of the syllabus content.

While comments indicated general agreement that the content was detailed and gave a clear indication of breadth and depth, a number of suggestions were provided for improving the clarity and scope of some content. The consistency of the cognitive level of the key words in some outcomes with the associated content was also identified as an area for review in Years 7–10.

Respondents commented positively about the inclusion of the references to the learning across the curriculum areas, but advised that a review of the references to better reflect the breadth of some areas was needed. Consultation identified the need for the inclusion of the glossary within both the K–6 and 7–10 sections of the print version of the syllabus.

Feedback affirming the content

Feedback	Sources
Organisation of content K–10	
The K–6 diagram is clear, easy to understand and clarifies the relationship between the strands and substrands.	Baulkham Hills (CM) Lismore (CM) Orange (CM) BCC (AIS) CECPD CEOCG CEOW AIS Submission 1
The K–6 diagram shows the place of ‘design and make’, and highlights the fact that the technology component of the syllabus involves more than computers.	Ryde (K–6 CM)
The order of content in the syllabus emphasises skills and inquiry-based learning.	Silverwater (CM)
The Years 7–10 diagram clarifies the relationships between the strand content. The summary of content provides a clear overview and the dot points are helpful.	BCC (AIS) Albury (CM) Lismore (CM)

Feedback	**Sources**
The syllabus provides increased flexibility for the delivery of the knowledge and understanding content.	Baulkham Hills (CM) Silverwater (CM) CEOCG
The inclusion of K–6 Science and Technology in the syllabus is supported as it informs Years 7–10 teachers about the expected prior learning of students.	Silverwater (CM)
Content K–6	
The content is manageable despite the fact that there is a broad range to cover.	Armidale (K–6 CM) Ryde (K–6 CM)
The content is clearly organised, represented in a user-friendly way and is presented in sufficient detail.	Albury (CM) Lismore (CM) Orange (CM)
Teachers will be better able to cater for students in small schools, stage-based and composite classes.	Orange (CM)
The content follows a sequential progression and helps to clarify the outcomes.	Submission 2
The Background information provided with the skills is a useful inclusion for primary teachers.	Baulkham Hills (CM) AIS CECPD Submission 2
Content Years 7–10	
The essential skills, knowledge and understanding are well organised, explicit and clarify the scope and depth of the content.	Albury (CM) Baulkham Hills (CM) Lismore Silverwater (CM)
The consistent use of key words helps to explain depth.	Silverwater (CM)
The inclusion of the content relating to the use and influence of science is supported and provides scope for relating the syllabus to up-to date scientific work.	BCC Silverwater (CM)
The syllabus represents the minimum content and allows teachers flexibility to present their own material.	Silverwater (CM)
The inclusion of related Life Skills outcomes within Stage 4 and Stage 5 is supported.	Baulkham Hills (CM) Silverwater (CM)
The reduction in the complexity of content will make it easier for programming.	CEOW STANSW
Learning across the curriculum	
The inclusion of coding for learning across the curriculum is helpful.	BCC AIS Orange (CM) Ryde (K–6 CM)
Learning across the curriculum material is at an appropriate range with good connections across the syllabus document.	Orange (CM) Submission 1

Feedback	**Sources**
The general capabilities and the cross-curriculum priorities of the Australian curriculum are embedded in the NSW *K–10 Science Syllabus* in meaningful and useful ways in the Working Scientifically and Working Technologically strands.	CEOCG
Sustainability This learning across the curriculum area is well defined and appropriately identified.	DEC
Information and Communication Technology Capability **(ICT)** The syllabus includes a meaningful statement reflecting how students develop competence in ICT.	DEC
The syllabus reflects a more consistent continuum of learning for ICT which is appropriately integrated into the syllabus content.	DEC

Matters raised and actions

Matters raised	**Sources**	**Actions**
Organisation of content K–10		
An explanation to clarify the status of the Australian curriculum content and the purpose of its coding is required.	Baulkham Hills (CM) Orange (CM) Silverwater (CM) CEOW	Support materials will explain the purpose of the coding of content.
In the Knowledge and Understanding strands/substrands, the relationship between the content statements summarising the overarching scientific and/or technological ideas, and the related knowledge content is unclear and requires clarification.	BCC Baulkham Hills (CM) Orange (CM) Silverwater (CM)	The text in the Organisation of content has been revised to clarify this relationship.
The distinction between 'such as' and 'including' requires clarification.	Baulkham Hills (CM) Silverwater (CM) Submission 2	The content has been reviewed to identify suggested examples as 'eg' rather than 'such as'. The term 'including' refers to specific aspects of content that are to be studied.
Contexts should be included in the diagrams and its importance strengthened in the text.	Baulkham Hills (CM) Silverwater (CM) DEC Submission 4 Survey x 1	The diagrams have been revised to include 'contexts' and the text strengthened.
Values and attitudes should be included in the diagram and at the start of each section of content.	Silverwater (CM)	The diagram represents the Organisation of content. Values and attitudes outcomes are addressed through the relevant skills, knowledge and understanding content.

Matters raised	Sources	Actions
Organisation of content K–6		
The diagram needs to be reviewed to more clearly show the strands and clarify the substrands.	Albury (CM) Baulkham Hills (CM) Orange (CM) DEC Survey x 1	The K–6 diagram has been revised to more clearly show the strands and substrands.
The K–6 content diagram should look like those presented in the Mathematics and English syllabuses.	CECPD	The purpose of the diagram is to specifically show the organisation of the content of K–6 Science and Technology, which differs from the way content is organised in the English and Mathematics syllabuses.
Organisation of content Years 7–10		
The Years 7–10 diagram lacks clarity in showing the relationships between the skills, knowledge and understanding content.	Baulkham Hills (CM) Lismore (CM) Silverwater (CM)	The diagram has been revised to clarify the relationship to the strands in Years 7–10.
The text in this section should provide greater clarity in relation to developing teaching and learning programs including that: • the knowledge and understanding content in the blocks may be split and/or retained in blocks • content from more than one knowledge and understanding strand can be integrated.	BCC Baulkham Hills (CM) Lismore (CM) Orange (CM) Silverwater (CM) Survey x 1 Submission 4	The text in the Organisation of content section has been revised to clarify the identified areas.
Content K–10		
Coding of the skills, knowledge and understanding content is required to facilitate planning and to provide a consistent means of communication about, and referencing to, the content.	BCC DEC AIS CEOSYD CEOW IEU ADSTA STANSW Albury (CM) Baulkham Hills (CM) Lismore (CM) Orange (CM) Silverwater (CM) Submission 4 Submission 5 Survey x 13	In Years 7–10 coding of content has been included for the Skills and the Knowledge and Understanding strands. In addition, an online interactive programming tool which will assist teachers to select and organise content for teaching and learning programs is under development.

Matters raised	Sources	Actions
The wording of some content requires review to clarify intent, scope and/or depth.	Albury (CM) Baulkham Hills (CM) Lismore (CM) Orange (CM) Silverwater (CM) Submission 3 Submission 5	The wording of some content has been reviewed to clarify the intent, scope and/or depth.
Some content is inappropriately placed within a stage.	DEC TF Submission 3 Submission 5 Survey x 1	The sequence of content relates to the year-by-year Australian curriculum content.
There are some inconsistencies in the cognitive level of the key words in the content with those in the related outcomes.	BCC AIS IEU Baulkham Hills (CM) Lismore (CM) STANSW TF Survey x 1	The key words of the content have been reviewed for consistency in relation to: • the cognitive level of the key word in the outcomes • the cognitive demand of the associated skill, knowledge and understanding content.
Content K–6		
The status of the K–6 content requires clarification.	Baulkham Hills (CM) DEC	The nature and status of the K–6 content have been clarified.
There is too much content in K–6 to be addressed in the time.	Baulkham Hills (CM) Lismore (CM) Silverwater (CM) DEC TF	While the content has been designed to be covered in the time available, the status of K–6 content has been further clarified. Teachers have the flexibility to make decisions about the emphasis given to particular aspects of content.
Fair testing could be included before Stage 2.	CEOSYD	The inclusion of fair testing aligns with its placement in the Australian curriculum content descriptions.
Content Years 7–10		
There appears to be a lot of content to cover and this may restrict inquiry-based learning.	AIS CEOW Baulkham Hills (CM) Lismore (CM) Silverwater (CM) TF Survey x 2	The Knowledge and Understanding and Content (Domain and Prescribed Focus Area) of the current syllabus has been reduced and integrated. In this less complex structure the processes of Working Scientifically can be more readily applied in inquiry-based learning.

Matters raised	Sources	Actions
Integrating the Australian curriculum strands of Science as a Human Endeavour with Science Understanding content: • restricts the scope of flexibility of the current syllabus • reduces emphasis and the intent of the nature, development, use and influence of science.	Silverwater (CM) STANSW Submission 4	The Knowledge and Understanding content: • clarifies the scope, depth and emphasis of understanding about the nature, development, use and influence of science • identifies the minimum content to address the Australian curriculum content descriptions.
The cognitive level of key words and the scope of the additional content require review.	BCC	The additional content has been reviewed to broaden the scope.
The purpose of the additional knowledge and understanding content requires clarification and strengthening.	Baulkham Hills (CM) Silverwater (CM)	The purpose of the additional content has been strengthened in the Organisation of content section.
Presentation of content (print version)		
The glossary should be included at the end of both the K–6 and Years 7–10 syllabuses.	Albury (CM) Baulkham Hills (CM) Lismore (CM) Silverwater (CM) CEOSYD	The glossary has been included in the print versions of the K–6 and Years 7–10 syllabuses. In the interactive online syllabuses, glossary words will be highlighted and linked. The provision of a K–10 glossary is consistent across Phase 1 syllabuses.
Some suggestions were provided for alternative formats for the Stage 4 and Stage 5 content including that: • the content should be arranged on opposite pages, organised by strand/substrands, not stages, so that it aligns • the content would be better presented in a table format with the outcomes.	BCC Silverwater (CM)	The staged presentation is consistent across syllabuses.
Learning across the curriculum K–10		
There are too many areas included.	Silverwater (CM)	The areas include the Australian curriculum's cross-curriculum priorities and general capabilities and other areas confirmed by NSW during the Round 1 consultation.
A statement about the requirement to integrate literacy, numeracy and ICT should be included.	CECPD	All learning across the curriculum areas, including literacy, numeracy and ICT learning areas are embedded in the descriptions of content.

Matters raised	**Sources**	**Actions**
Learning across the curriculum needs to be renamed and presented as two distinct groups consistent with the Australian curriculum's general capabilities and cross-curriculum priorities.	DEC CEOSYD	The organisation of the learning across the curriculum areas has been reviewed. They are represented consistently with the Australian curriculum's approach to general capabilities and cross-curriculum priorities.
The consistency of tagging of learning across the curriculum areas within syllabus content needs to be improved to ensure appropriate opportunities are identified.	DEC AIS Submission 3	The consistency of tagging of learning across the curriculum areas has been reviewed and revised to ensure authentic and appropriate opportunities.
Consistent definitions of learning across the curriculum need to be applied across all four syllabuses.	DEC	The definitions for learning across the curriculum have been reviewed to ensure a consistent approach to these areas while maintaining subject integrity.
The scope of literacy learning needs to be reviewed through an analysis of the syllabus. A consistent definition for literacy needs to be provided at the beginning of each cross-curriculum literacy statement.	DEC	The scope of literacy learning across each syllabus and the definition for literacy has been reviewed.
It is unclear if, and how learning across the curriculum material is to be included in teaching programs.	SEC AASE	Learning across the curriculum areas are embedded in the content and are therefore addressed in teaching and learning programs.
It is strongly recommended that the term 'Aboriginal and Torres Strait Islander' be used throughout the syllabus rather than the term 'Indigenous'.	DEC	The terms 'Aboriginal' and 'Torres Strait Islander' are used when referring to Aboriginal content. The term 'Indigenous' is used when referring to the first peoples of all nations.
The wording 'Aboriginal perspectives' should be replaced with 'Aboriginal content'.	DEC	The wording 'Aboriginal perspectives' has been reviewed.
Suggestions to improve the quality of some areas of the learning across the curriculum section included: • Sustainability content lacks depth and focus • Aboriginal and Torres Strait Islander histories and cultures is not sufficiently represented • Literacy and numeracy needs broadening • Numeracy has limited tagging • Intercultural Understanding statements are limited	 Armidale (K–6 CM) TF DEC DEC DEC	The learning across the curriculum content has been reviewed and strengthened.

Matters raised	Sources	Actions
• Critical and Creative Thinking statements are not indicative of the importance of this area • The meaning of Difference and Diversity requires greater clarity.	DEC	
Glossary Some additional words related to science and technology should be included in the glossary. The inclusion of a language section similar to the Mathematics syllabus would be useful.	BCC CEOW Lismore (CM) Silverwater (CM) CECPD (CM)	The glossary has been revised to include additional words that have specific relevance for teaching and learning in science and technology or interpretation of the syllabus.

5.7 Students with special education needs, including Years 7–10 Life Skills outcomes and content

Summary

The syllabus content for students with special education needs was generally supported during consultation. Respondents identified that overall the content provides for the full range of students and offers sufficient flexibility for teachers to make adjustments for differentiated programs. Feedback identified that some outcomes and the wording of some content may not provide appropriate access for students with significant disabilities. Feedback also noted that the relationship between Life Skills and the Stage 4 and Stage 5 outcomes is clear, and that there is a direct link between Life Skills and regular Stage 4 and Stage 5 syllabus content.

Some respondents commented that the advice about adjustments to assessment for students with special education needs was clear. However, other feedback indicated that further advice about adjustments to teaching, learning and assessing was required. Respondents also noted that the advice provided in support materials would be important to teachers' understanding that adjustments may be made prior to students undertaking a Life Skills program.

Feedback affirming the information on students with special education needs, including Years 7–10 Science Life Skills outcomes and content

Feedback	Sources
K–10	
The curriculum is inclusive and reinforces the further academic challenge for students undertaking Life Skills.	Sydney (SECM) Silverwater (CM)
The Life Skills component of the draft syllabuses addresses the needs of students very well and allows teachers to use their discretion.	AIS
K–6	
The outcomes are appropriately sequenced and language is clear.	Sydney (SECM) North Rocks (SECM) CECPD (CM)
The K–6 Background information explains the skills for each stage and those required at the earlier and later stages.	Sydney (SECM)
The grouping of outcomes and content is logical. In K–6, the outcomes and content can be adjusted for students with special education needs.	Sydney (SECM) North Rocks (SECM)
Outcomes Years 7–10 Life Skills	
The relationship between Life Skills and regular Stage 4 and 5 outcomes is clear.	Lismore (CM) Silverwater (CM) Sydney (CM) IWSETN
The placement of related life skills outcomes and content with the Stage 4 and Stage 5 content is helpful for teachers.	Silverwater (CM) CEOSYD Sydney (SECM) IWSETN AIS

Feedback	**Sources**
The Working Scientifically outcomes are affirmed. The advice on practical experiences provides useful suggestions for teachers.	CEOSYD IWSETN
The inclusion of advice about reporting against Life Skills outcomes and content, and advice about reporting against outcomes from a lower stage in K–6 was supported.	SEC
Content K–10 The Life Skills content is well defined and the cognitive demand appropriate. There is a direct link between the regular Stage 4 and Stage 5 course content and the Life Skills content.	Sydney (SECM) IWSETN

Matters raised and actions

Matters raised	**Sources**	**Actions**
Students with special education needs		
In the Students with special education needs section of the syllabus the statements about special needs are too generic.	CECPD	More specific advice about supporting teachers of students with special education needs in K–6 is available on the Board of Studies website.
The syllabus should outline the diversity of students with special education needs, and clarify that gifted and talented students may also have learning difficulties and/or physical disabilities.	DEC	Further advice about the diversity of students with special education needs has been included in the syllabus and in support materials.
Information should be included about the range of adjustments which can be provided for additional support as well as recognition that students with special education needs may be able to access the regular outcomes with adjustments.	DEC	Advice about adjustments is included in the syllabus and support materials.
Advice regarding the provision for students with special education needs including programming support and other materials is required with the release of the syllabuses.	AASE	Materials to support initial implementation will accompany the release of the syllabuses. Further advice about programming and assessment including review of the Life Skills support materials will be undertaken during Term 4.
Further advice is required about making adjustments to teaching, learning, assessment and reporting for students with special education needs.	Sydney (SECM) SEC DEC TF	Advice on making adjustments for students with special education needs is provided in support materials.

Matters raised	Sources	Actions
The advice regarding communication systems in the English syllabus should be included in all K–10 syllabuses.	North Rocks (SECM)	Advice about providing adjustments to accommodate communication systems used by students with special education needs has been included in the Students with special education needs section.
Years 7–10 Life Skills		
Clarification is required about which students should study Life Skills outcomes and content.	AASE IWSETN Sydney (SECM) SEC	Advice in the syllabus clarifies that Life Skills outcomes and content should be studied by students who are unable to achieve the regular Stage 4 and Stage 5 outcomes and content.
An explanation of the terms 'independently' and 'with support' in relation to achievement of outcomes is required.	AASE	Advice about demonstration of achievement of outcomes will be provided in the Life Skills support materials.
Advice about the selection of content in the Year 7–10 Life Skills content section requires strengthening and prominence.	IWSETN	The advice has been strengthend. The interactive online syllabus will allow customised views of sections of the syllabuses.
Further advice is required about reporting achievement of students in relation to Life Skills outcomes and content.	Sydney (SECM)	Advice about reporting achievement of students undertaking Life Skills outcomes and content is provided in the Life Skills support document *Life Skills Years 7–10: Advice on Planning, Programming and Assessment.*
The advice regarding curriculum options and accessing outcomes and content for students with special education needs, including Life Skills, requires review.	SEC AASE DEC Sydney (SECM) North Rocks (SECM)	This advice has been reviewed and strengthened.
Life Skills outcomes and content should be included as part of the continuum of learning.	North Rocks (SECM)	Life Skills outcomes and content are an alternative option to the regular Stage 4 and Stage 5 courses and as such are not included in the learning continuum. Their relationship is described in the Life Skills outcomes and content section of the syllabus.

Matters raised	Sources	Actions
The flow chart describing the decision-making process for accessing Life Skills outcomes and content should be included in the K–10 syllabuses.	SEC AASE	The diagram is included in support materials for Life Skills. The interactive online syllabus will provide greater flexibility to navigate between syllabus and support materials.
K–10 outcomes		
The outcomes use 'higher order' wording which is understood only when read in conjunction with the associated content.	Sydney (SECM)	The content clarifies the scope and depth of the outcomes. Content is selected based on students' individual needs.
The outcomes and content are too abstract and describe concepts that are too difficult for students with significant disabilities.	North Rocks (SECM)	Support materials will provide advice about adjustments for students with significant disabilities.
The language used in many of the outcomes indicates expectations beyond many students undertaking Life Skills.	Lismore (CM)	The outcomes have been reviewed to provide appropriate access for the range of students with special education needs undertaking Life Skills, including those with more significant disabilities.
There are not enough outcomes for some students with significant disabilities.	Sydney (SECM)	
The Life Skills outcomes included on each Stage 4 and Stage 5 content page should refer to syllabus sections.	DEC	Life Skills outcomes and content are included in the Life Skills section of each syllabus.
Regular course outcomes codes for Stage 4 and Stage 5 should be included on Life Skills content pages.	North Rocks (SECM) Silverwater (CM) SEC	The codes for regular Stage 4 and Stage 5 course outcomes have been included on the Life Skills content pages.
Clear and consistent messages should be provided about syllabus requirements in relation to content expectations for Life Skills students 7–10.	DEC	The requirements for the Life Skills course are included in the Life Skills outcomes and content section of the syllabus and in support materials.
The presentation of the Life Skills outcomes and related Stage 4 and Stage 5 outcomes needs to clarify and reinforce the use of adjustments as an option.	Sydney (SECM)	The advice provided in the Students with special education needs section is explicit about the scope of available curriculum options. The support materials developed by the Board of Studies will provide further advice on adjustments.

Matters raised	Sources	Actions
7–10 Life Skills Content		
More sub-headings are needed to group the content.	North Rocks (SECM)	The presentation of content has been reviewed to improve clarity and accessibility and some additional subheadings included as appropriate.
The language used in much of the content indicates expectations beyond many students undertaking Life Skills.	Lismore (CM)	The content has been reviewed to provide appropriate access for the range of students with special education needs undertaking Life Skills, including those with more significant disabilities.
There is not enough content for some students with significant disabilities.	Sydney (SECM)	
The content is too abstract and describes concepts that are too difficult for students with significant disabilities.	North Rocks (SECM)	
The advice in the Years 7–10 Life Skills content section regarding practical experiences could be easily missed by teachers. It requires greater prominence in the syllabus.	IWSETN	The Years 7–10 Life Skills content section has been moved above Working Scientifically to give it greater prominence.
Include another diagram showing how the Life Skills knowledge and understanding content is integrated with the skills.	Silverwater (CM)	Life Skills content is organised in the same way as the content in the regular Years 7–10 syllabus and the diagram is inclusive of the Life Skills content. The Years 7–10 diagram has been reviewed to more clearly show the relationship between the knowledge, understanding and skills content.
Include more specific content on reproduction/puberty in Living World rather than a list of systems and their functions.	North Rocks (SECM)	This content area is currently addressed as part of the PDHPE syllabus.

5.8 Continuum of learning in Science K–10

Summary

The feedback indicated support for the continuum of learning, identifying that a clear progression is evident. The outcomes and stage statements illustrated a continuum of learning for K–10 Science and K–8 Technology that would assist teachers in planning for the transition from K–6 to Years 7–10. The majority of comments related to the importance of the inclusion of the stage statements in the K–6 section of the syllabus.

Feedback affirming the continuum of learning in Science K–10

Feedback	Sources
The continuum of learning shows a clear progression across Early Stage 1 to Stage 5.	Lismore (CM) Baulkham Hills (CM) Silverwater (CM)
The continuum shows an appropriate increase in the level of the skills development between Stage 3 and Stage 4, and highlights the transition in cognitive demand between Stage 4 and Stage 5.	BCC AIS
Consistency in the naming of the Years 7–10 Knowledge and Understanding strands and K–6 substrands is supported.	Albury (CM) CEOCG
Stage statements	
The stage statements are clearly written, illustrate a clear continuum of learning and provide an overview of what students are expected to know and be able to do.	Baulkham Hills (CM) Lismore (CM) Silverwater (CM) BCC (AIS)
The stage statements describe student achievement in each strand and can easily be used for reporting.	CEOSYD
The stage statements will assist in developing personal learning programs for students with learning difficulties and are useful in planning the transition from K–6 to Years 7–10.	Lismore (CM)

Matters raised and actions

Matters raised	Sources	Actions
K–10 outcomes		
The continuum of learning K–10 needs to be reviewed to ensure clear and appropriate sequencing.	DEC	The continuum of learning has been reviewed to ensure stage appropriate sequencing of outcomes and content.
The objectives and outcomes for values and attitudes are not written for each stage.	AIS TF	The values and attitudes are not linked to a single stage but apply across K–6 and 7–10 respectively.
Stage statements		
References to Prior Early Stage learning are needed in the Early Stage 1 stage statement.	TF	A prior-to-school learning statement has been included in the Stage statements section.

Matters raised	**Sources**	**Actions**
In the print version, the stage statements should be included in both the K–6 and Years 7–10 syllabuses.	Lismore (CM) Silverwater (CM) Albury (CM) CEOSYD	In K–6 the stage statements have been moved to the Outcomes section of the syllabus.
Consideration should be given to including the stage statements at the beginning of each stage in the content section of the syllabus.	CEOW TF DEC AIS	
The stage statements should be reviewed to develop a more consistent structure across the four syllabuses.	DEC	The stage statements have been reviewed. They describe the knowledge, understanding and skills developed at the end of a stage in each subject in a consistent way. The stage statements are based on and reflect the scope of the course outcomes, and the organisation and sequence of content.
There should be an emphasis on inquiry in the K–6 stage statements.	CECPD	The K–6 stage statements make explicit the intent and scope of science inquiry.

5.9 Assessment

Summary

There were very few comments relating to assessment and reporting arising during consultation. The matters raised related to the need for increased advice for teachers in relation to standards-referenced assessment and support to assist implementation.

Feedback affirming the assessment advice

Feedback	Sources
The outcomes provide clear links to and direction for assessing student learning.	Lismore Ryde (K–6 CM) Survey x 6
Assessment principles are well articulated.	Submission 2

Matters raised and actions

Matters raised	Sources	Actions
K–10		
Further advice and support for assessment and reporting needs to be provided in relation to the following: • standards-referenced assessment • course performance descriptors • assessing inquiry processes • work samples on the Assessment Resource Centre (ARC) website • assessment strategies.	Albury (CM) Silverwater (CM) CECPD (CM) TF IEU	Support materials will include further advice on assessment and reporting.
Further advice is required in relation to the role of stage statements in programming, assessing and reporting, and their place in identifying standards.	DEC	The role of the stage statements will be clarified in advice about assessment in support materials.
There is a need to reinforce the fact that the values and attitudes are not included in determining and reporting students' grades.	Orange (CM)	The advice in the syllabus relating to Reporting makes this explicit.

5.10 Other comments

Summary

The majority of consultation feedback commented on the need for support materials and professional learning to support the implementation of the syllabus. Feedback also highlighted the need for subject specific support in relation to the development of teaching and learning programs. Feedback supported the provision of a programming tool to assist in developing teaching and learning programs.

Matters raised and actions

Matters raised	Sources	Actions
K–10 Implementation		
Support materials and quality professional learning development will be necessary to assist all teachers to develop teaching and learning programs including: • scope, sequences and mapping tools • overviews and sample units of work • work samples on the ARC website • multistage programs in K–6 • integration across KLAs in K–6 • science content knowledge to assist non-specialist K–6 teachers • integration of the knowledge and understanding of and about the nature, development, use and influence of science content • incorporation of learning across the curriculum.	STANSW Silverwater (CM) Orange (CM) Albury (CM) Baulkham Hills (CM) Armidale (K–6 CM) Lismore (CM) CECPD CEOCG TF STANSW Submission 4 Survey x 1	The Board of Studies will provide materials to support initial implementation of the syllabus, including an interactive online syllabus accompanied by a programming tool.
There are implications for K–6 for resourcing and storage of equipment.	TF	The syllabus assumes a non-specialist teaching environment in primary schools. The majority of content can be addressed with the resources that are readily available to most schools.
A timeline for implementation needs to be provided.	TF	During 2012 the Board in consultation with the sectors will provide advice about implementation.

Matters raised	Sources	Actions
K–10 The syllabus should recognise the diversity of Australian learners and provide guidance to teachers on curriculum differentiation to meet the diverse learning needs of these students, including: • Aboriginal and Torres Strait Islander students from diverse backgrounds in urban and rural settings • gifted and talented students • students learning English as an additional language or dialect, including the use of ESL scales for EAL students (Mathematics, Science and History).	DEC TF	Additional advice has been included in the syllabus on meeting the needs of gifted and talented students. Further advice on meeting diverse student needs will be incorporated in support materials.
Explanations of the terms used to describe the elements of the syllabus should be provided.	DEC	Explanations of these terms will be provided in initial support materials.
The amount of content in the new K–10 English, Mathematics, Science and History syllabuses will diminish the time available for other learning areas.	TF	The syllabuses are designed to be taught within the time currently available in NSW schools. There is flexibility, particularly in the primary curriculum, to make decisions on areas of emphasis based on learning needs and available time.
The amount of content in all four curriculum areas should be re-evaluated to allow time for the development of higher order and critical thinking skills and skills unique to the subject discipline.	TF	The content has been reviewed to provide opportunities for the development of subject specific and critical thinking skills.
The outcomes and content need to provide more scope and flexibility for creativity in developing teaching programs.	DEC Survey x 3	The scope of the outcomes has been reviewed across each stage.
It would be helpful if the syllabus and its implementation could be evaluated after 2–3 years.	Albury (CM) Orange (CM) Silverwater (CM)	The Board has a regular process for systematic evaluation of syllabuses to ensure their quality and suitability.
The replacement of the foundation statements with stage statements in Years K–6 needs targeted and clear communication.	DEC	The advice stating that the stage statements replace the K–6 foundation statements will be included in the *Guide to the new syllabus*.

Matters raised	Sources	Actions
Interactive online syllabus		
The interactive online version of the syllabuses needs to be further developed to enable filtering for learning across the curriculum areas and some aspects of content.	DEC	Further work on the interactive online syllabus that will enable filtering of learning across the curriculum areas is under development.
Enhancements to the interactive online syllabus to provide a greater level of hyperlinking, including access to resources, support documents and website, is required.	CEOSYD CEOW	The interactive online syllabus is under development and consideration will be given to suggestions for enhancements to hyperlinking.
In its current level of functionality, the interactive online syllabus is a little difficult to navigate and it is difficult to get an overview of the syllabus.	AIS	Further work to improve functionality is under development.
An application for Apple and Android devices should be considered.	CEOW	The development of an application is being considered.

6 Quantitative analysis of survey responses

6.1 Science and Technology K–6 survey (note: due to rounding, some percentages may not total 100%)

Survey item	Number of responses	Strongly agree		Agree		Disagree		Strongly disagree		Non-response	
		n	%	n	%	n	%	n	%	n	%
Rationale The Rationale describes the place and purpose of Science and Technology in the curriculum.	14	1	7%	12	86%	0	0%	0	0%	1	7%
Objectives The Objectives define in broad terms the values, attitudes, skills, knowledge and understanding to be developed through the study of Science and Technology.	14	0	0%	12	86%	1	7%	1	7%	0	0%
Outcomes The intent of the Outcomes is clear.	13	2	15%	11	85%	0	0%	0	0%	0	0%
The Outcomes provide specific direction for teaching, learning and assessing.	13	1	8%	8	62%	1	8%	2	15%	1	8%
Content The Organisation of content provides a clear overview of the structure of the syllabus.	13	0	0%	12	92%	1	8%	0	0%	0	0%
The Organisation of content makes clear the relationship between the strands and/or substrands.	13	0	0%	9	69%	3	23%	0	0%	1	8%
The content of the Working Scientifically and Working Technologically strands shows a clear development through the stages.	13	2	15%	9	69%	1	8%	0	0%	1	8%
The Content clarifies the scope and depth of the expected knowledge and skills to be developed for understanding of the key ideas and concepts.	13	2	15%	7	54%	1	8%	1	8%	2	15%
The Content is sufficiently clear to develop teaching and learning programs.	13	1	8%	8	62%	1	8%	2	15%	1	8%
Continuum of learning The outcomes and stage statements illustrate a continuum of learning for K–10 Science and K–8 Technology.	13	2	15%	7	54%	1	8%	1	8%	2	15%

6.2 Science Years 7–10 survey (note: due to rounding, some percentages may not total 100%)

Survey item	Number of responses	Strongly agree		Agree		Disagree		Strongly disagree		Non-response	
		n	%	n	%	n	%	n	%	n	%
Rationale The Rationale describes the place and purpose of Science in the curriculum.	60	13	22%	42	70%	0	0%	1	2%	4	7%
Objectives The Objectives define in broad terms the values, attitudes, skills, knowledge and understanding to be developed through the study of Science.	60	9	15%	47	78%	1	2%	1	2%	2	3%
Outcomes The Outcomes clarify the scope and depth of what students should know and be expected to achieve by the end of each stage.	58	8	14%	40	69%	8	14%	2	3%	0	0%
The Outcomes in each stage clearly identify the knowledge, understanding and skills to be developed.	58	8	14%	41	71%	7	12%	2	3%	0	0%
Content The Organisation of content provides a clear overview of the structure of the syllabus.	58	4	7%	35	60%	12	21%	5	9%	2	3%
The Organisation of content makes clear the intended relationship between the strands to be developed in teaching and learning programs.	58	3	5%	35	60%	15	26%	3	5%	2	3%
The Content makes explicit the key scientific ideas and concepts to be developed in each stage.	56	6	11%	40	71%	8	14%	1	2%	1	2%
The Content clarifies the scope and depth of the essential knowledge and skills to be developed for understanding of the key ideas and concepts.	56	3	5%	33	59%	14	25%	4	7%	2	4%
The Content provides the basis for developing teaching and learning programs.	56	7	13%	38	68%	5	9%	3	5%	3	5%
Life Skills The inclusion of related Life Skills outcomes within the Stage 4 and Stage 5 content is useful.	56	9	16%	27	48%	5	9%	4	7%	11	20%
The relationship between Life Skills outcomes and content, and Stages 4 and 5 outcomes and content, is clear.	55	4	7%	26	47%	3	6%	1	2%	21	38%

Survey item	Number of responses	Strongly agree		Agree		Disagree		Strongly disagree		Non-response	
		n	%	n	%	n	%	n	%	n	%
The Life Skills outcomes are accessible to the range of students undertaking Life Skills outcomes and content.	55	1	2%	26	47%	5	9%	1	2%	22	40%
The advice in the Years 7–10 Life Skills content section about Working Scientifically and practical experiences will assist in programming the Life Skills outcomes and content.	55	3	6%	31	56%	2	4%	0	0%	19	35%
The advice relating to the integrated use of Life Skills knowledge and understanding content with skills content is clear.	55	1	2%	22	40%	7	13%	0	0%	25	46%
The life Skills content is relevant for the range of students undertaking Life Skills outcomes and content.	55	3	6%	20	36%	10	18%	0	0%	22	40%
Continuum of learning The outcomes and stage statements illustrate a continuum of learning K–10 Science.	55	6	11%	46	84%	2	4%	1	2%	0	0%

7 Respondents

7.1 Consultation meetings

***Science K–10 Draft Syllabus Version 2*: afternoon meetings**
(code: CM)

Venue	Date	Number of participants			
		K–6	Years 7–10	Life Skills	Total
Lismore	6 March	10	19	0	29
Silverwater	8 March	8	56	0	64
Orange	13 March	4	10	0	14
Albury	15 March	7	13	0	20
Baulkham Hills	19 March	11	61	0	72

Kindergarten to Year 6 draft syllabuses Version 2 – all learning areas: full-day meetings
(code: K–6 CM)

Venue	Date	Number of participants
Armidale	1 March	11
Ryde	20 March	11

Years 7 to 10 draft syllabuses Version 2 – all learning areas: special education meetings
(code: SECM)

Venue	Date	Number of participants
Sydney (at the Board of Studies)	9 March	11
North Rocks	14 March	20

Board Curriculum Committee consultation meeting at OBOS on 26 March 2012
(code: BCC)

Feedback on the *Science K–10 Draft Syllabus Version 2* was also gathered at the following meetings:

Venue	Date	Number of participants
Inner West Special Education Teachers Network Meeting at CEO Sydney (code: IWSETN)	7 March	15
Catholic Education Commission – Professional Development meeting (code: CECPD)	21 March	51

Board of Studies Special Education Committee meeting on 3 April 2012
(code: SEC)

7.2 Written submissions

Organisations, groups and submissions	**Code**
Australian Association of Special Education	AASE
Board of Studies Special Education Committee	SEC
NSW Department of Education and Communities	DEC
Association of Independent Schools of NSW	AIS
NSW Teachers Federation	TF
NSW Independent Education Union	IEU
Catholic Education Office – Archdiocese of Canberra and Goulburn	CEOCG
Catholic Education Office – Diocese of Wollongong	CEOW
Catholic Education Office Sydney	CEOSYD
Science Teachers' Association of NSW	STANSW
Albury and District Science Teachers' Association Inc.	ADSTA
Individual Respondent	Submission 1
Individual Respondent	Submission 2
Individual Respondent	Submission 3
Science Educator Network Group	Submission 4
Barker College Science Department	Submission 5