Years 5–6 standard elaborations — Australian Curriculum v9.0: Design and Technologies

Purpose

The standards elaborations (SEs) support teachers to connect curriculum to evidence in assessment so that students are assessed on what they have had the opportunity to learn. The SEs can be used to:

- make consistent and comparable judgments, on a five-point scale, about the evidence of learning in a folio of student work across a year/band
- develop task-specific standards (or marking guides) for individual assessment tasks
- quality assure planning documents to ensure coverage of the achievement standard across a year/band.

Structure

The SEs have been developed using the Australian Curriculum achievement standard. The achievement standard for Design and Technologies describes what students are expected to know and be able to do at the end of each year. Teachers use the SEs during and at the end of a teaching period to make on-balance judgments about the qualities in student work that demonstrate the depth and breadth of their learning.

In Queensland, the achievement standard represents the C standard — a sound level of knowledge and understanding of the content, and application of skills. The SEs are presented in a matrix where the discernible differences and/or degrees of quality between each performance level are highlighted. Teachers match these discernible differences and/or degrees of quality to characteristics of student work to make judgments across a five-point scale.

ACiQ | v9.0

<table>
<tr><td colspan="2">Years 5–6 Australian Curriculum: Design and Technologies achievement standard</td></tr>
<tr><td colspan="2">By the end of Year 6 students explain how people design products, services and environments to meet the needs of communities, including sustainability. For each of the 3 prescribed technologies contexts they explain how the features of technologies impact on design decisions and they create designed solutions. Students select and justify design ideas and solutions against design criteria that include sustainability. They communicate design ideas to an audience using technical terms and graphical representation techniques. Students develop project plans, including production processes, and select technologies and techniques to safely produce designed solutions.</td></tr>
<tr><td colspan="2">Source: Australian Curriculum, Assessment and Reporting Authority (ACARA), Australian Curriculum Version 9.0 Design and Technologies for Foundation–10 https://v9.australiancurriculum.edu.au/f-10-curriculum/learning-areas/design-and-technologies/year-6?view=quick&detailed-content-descriptions=0&hide-ccp=0&hide-gc=0&side-by-side=1&strands-start-index=0&subjects-start-index=0</td></tr>
</table>

Years 5–6 Design and Technologies standard elaborations

		A	B	C	D	E
		The folio of student work contains evidence of the following:				
Knowledge and understanding	**Technologies and society**	<u>discerning</u> explanation of how people design products, services and environments to meet the needs of communities, including sustainability	<u>detailed</u> explanation of how people design products, services and environments to meet the needs of communities, including sustainability	explanation of how people design products, services and environments to meet the needs of communities, including sustainability	<u>description</u> of how people design products, services and environments to meet the needs of communities, including sustainability	<u>statement/s about</u> how people design products, services and environments
	Technologies contexts	<u>discerning</u> explanation of how the features of technologies impact on design decisions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	<u>detailed</u> explanation of how the features of technologies impact on design decisions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	explanation of how the features of technologies impact on design decisions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	<u>description</u> of the features of technologies that impact on design decisions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	<u>statement/s about</u> the features of technologies for <u>one of more</u> of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations

		A	B	C	D	E
Processes and production skills	**Investigating and defining***					
	Generating and designing	communication of <u>considered</u> design ideas to an audience including: • use of technical terms • <u>comprehensive</u> use of graphical representation techniques	communication of <u>effective</u> design ideas to an audience using: • technical terms • <u>detailed</u> graphical representation techniques	communication of design ideas to an audience using: • technical terms • graphical representation techniques	communication of <u>superficial</u> design ideas to an audience using: • technical terms <u>and/or</u> • graphical representation techniques	<u>statement/s about</u> design ideas
	Producing and implementing	<u>proficient</u> creation of designed solutions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	<u>effective</u> creation of designed solutions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	creation of designed solutions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	creation of <u>aspects of</u> designed solutions for each of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations	creation of <u>fragmented</u> design solutions for <u>one of more</u> of the 3 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production; Food specialisations • Materials and technologies specialisations
		<u>purposeful</u> selection of technologies and techniques to safely produce designed solutions	<u>effective</u> selection of technologies and techniques to safely produce designed solutions	selection of technologies and techniques to safely produce designed solutions	<u>guided</u> selection of technologies and techniques to safely produce designed solutions	<u>directed</u> selection of technologies and techniques to safely produce designed solutions

		A	B	C	D	E
	Evaluating	selection and discerning justification of design ideas and solutions against design criteria that include sustainability	selection and logical justification of design ideas and solutions against design criteria that include sustainability	selection and justification of design ideas and solutions against design criteria that include sustainability	selection and description of design ideas and solutions	statement/s about design ideas and solutions
	Collaborating and managing	development of comprehensive project plans including production processes.	development of detailed project plans including production processes.	development of project plans including production processes.	guided development of partial project plans including production processes.	directed development of fragmented project plans and/or production processes.

*Sub-strand assessed within Technologies contexts for this level

Key	shading emphasises the qualities that discriminate between the A–E descriptors