Years 7–8 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

Years 7–8 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**	discerning explanation of how people design, innovate and produce products, services and environments for preferred futures	detailed explanation of how people design, innovate and produce products, services and environments for preferred futures	explanation of how people design, innovate and produce products, services and environments for preferred futures	description of how people design, innovate and produce products, services and environments for preferred futures	statement/s about how people design, innovate and/or produce designed solutions
	Technologies contexts	discerning explanation of how the features of technologies impact on design decisions for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	detailed explanation of how the features of technologies impact on design decisions for each of the 4 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 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	description of how the features of technologies impact on design decisions for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	statement/s about the features of technologies for one or more of the 4 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**	proficient analysis of needs or opportunities for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	effective analysis of needs or opportunities for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	analysis of needs or opportunities for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	superficial analysis of needs or opportunities for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	identification of needs or opportunities for one or more of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations
	Generating and designing	proficient creation and adaptation of comprehensive design ideas, processes and solutions based on analysis of needs or opportunities	informed creation and adaptation of effective design ideas, processes and solutions based on analysis of needs or opportunities	creation and adaptation of design ideas, processes and solutions based on analysis of needs or opportunities	partial creation and adaptation of simple design ideas, processes and solutions based on analysis of needs or opportunities	fragmented creation of and/or adaptation of aspects of basic design ideas, processes and solutions based on needs or opportunities
		communication of design ideas and solutions to audiences with: • considered use of technical terms • comprehensive use of graphical representation techniques, including using digital tools	communication of design ideas and solutions to audiences with: • effective use of technical terms • detailed use of graphical representation techniques, including using digital tools	communication of design ideas and solutions to audiences using: • technical terms • graphical representation techniques, including using digital tools	communication of design ideas and solutions to audiences with: • superficial use of technical terms and/or • simple use of graphical representation techniques, including using digital tools	communication of design ideas and solutions with: • fragmented use of technical terms and/or • basic use of graphical representation techniques, including using digital tools

		A	B	C	D	E
	Producing and implementing	**proficient** and safe production of designed solutions for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	**effective** and safe production of designed solutions for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	safe production of designed solutions for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	safe production of **aspects of** designed solutions for each of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations	safe production of a designed solution, **with direction** for one or more of the 4 prescribed technologies contexts: • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations
	Evaluating	**discerning** justification of their decisions against developed design criteria that include sustainability	**logical** justification of their decisions against developed design criteria that include sustainability	justification of their decisions against developed design criteria that include sustainability	**partial** justification of their decisions against **aspects of** developed design criteria that include sustainability	**statement/s about** design decisions
	Collaborating and managing	independent and collaborative • **comprehensive** documentation • **proficient** management of production processes.	independent and collaborative • **detailed** documentation • **effective** management of production processes.	independent and collaborative documentation and management of production processes.	independent and collaborative • **partial** documentation • **guided** management of production processes.	independent **and/or** collaborative • **fragmented** documentation • **directed** management of production processes.

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