Years 7–8 standard elaborations — Australian Curriculum v9.0: Digital 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 Digital 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

By the end of Year 8 students develop and modify creative digital solutions, decompose real-world problems, and evaluate alternative solutions against user stories and design criteria. Students acquire, interpret and model data with spreadsheets and represent data with integers and binary. They design and trace algorithms and implement them in a general-purpose programming language. Students select appropriate hardware for particular tasks, explain how data is transmitted and secured in networks, and identify cyber security threats. They select and use a range of digital tools efficiently and responsibly to create, locate and share content; and to plan, collaborate on and manage projects. Students manage their digital footprint.

Source: Australian Curriculum, Assessment and Reporting Authority (ACARA), *Australian Curriculum Version 9.0 Digital Technologies for Foundation–10*
https://v9.australiancurriculum.edu.au/f-10-curriculum/learning-areas/digital-technologies/year-7?view=quick&detailed-content-descriptions=0&hide-ccp=0&hide-gc=0&side-by-side=1&strands-start-index=0&subjects-start-index=0

Years 7–8 Digital Technologies standard elaborations

		A	B	C	D	E
		The folio of student work contains evidence of the following:				
Knowledge and understanding	**Digital systems**	<u>proficient</u> selection of appropriate hardware for particular tasks	<u>effective</u> selection of appropriate hardware for particular tasks	selection of appropriate hardware for particular tasks	<u>guided</u> selection of appropriate hardware for particular tasks	<u>directed</u> selection of appropriate hardware for particular tasks
		<u>considered</u> explanation of how data is transmitted and secured in networks	<u>detailed</u> explanation of how data is transmitted and secured in networks	explanation of how data is transmitted and secured in networks	<u>description</u> of how data is transmitted <u>and/or</u> secured in networks	<u>statement/s about</u> data transmission and/or security
	Data representation	<u>reasoned</u> representation of data with integers and binary	<u>effective</u> representation of data with integers and binary	representation of data with integers and binary	<u>partial</u> representation of data with integers and binary	<u>fragmented</u> representation of data with integers <u>and/or</u> binary

		A	B	C	D	E
Processes and production skills	**Acquiring, managing and analysing data**	proficient acquisition, interpretation and modelling of data with spreadsheets	effective acquisition, interpretation and modelling of data with spreadsheets	acquisition, interpretation and modelling of data with spreadsheets	partial acquisition, interpretation and/or modelling of data with spreadsheets	fragmented acquisition, interpretation and/or modelling of data with spreadsheets
	Investigating and defining	reasoned decomposition of real-world problems	logical decomposition of real-world problems	decomposition of real-world problems	partial decomposition of real-world problems	statement/s about real-world problems
	Generating and designing	proficient design and tracing of algorithms	effective design and tracing of algorithms	design and tracing of algorithms	guided design and/or tracing of algorithms	directed design and/or tracing of algorithms
		considered development and modification of creative digital solutions	effective development and modification of creative digital solutions	development and modification of creative digital solutions	partial development and modification of aspects of creative digital solutions	fragmented development and/or modification of aspects of creative digital solutions
	Producing and implementing	proficient implementation of algorithms in a general-purpose programming language	effective implementation of algorithms in a general-purpose programming language	implementation of algorithms in a general-purpose programming language	partial implementation of algorithms in a general-purpose programming language	directed implementation of algorithms
	Evaluating	discerning evaluation of alternative solutions against user stories and design criteria	plausible evaluation of alternative solutions against user stories and design criteria	evaluation of alternative solutions against user stories and design criteria	description of alternative solutions against user stories and design criteria	identification of features of solutions

		A	B	C	D	E
	Collaborating and managing	proficient selection and use of a range of digital tools to efficiently and responsibly: • create, locate and share content • plan, collaborate on and manage projects	effective selection and use of a range of digital tools to efficiently and responsibly: • create, locate and share content • plan, collaborate on and manage projects	selection and use of a range of digital tools to efficiently and responsibly: • create, locate and share content • plan, collaborate on and manage projects	variable selection and use of a range of digital tools to partially: • create, locate and/or share content • plan, collaborate on and/or manage projects	directed selection and use of a range of digital tools
	Privacy and security	discerning identification of cyber security threats	informed identification of cyber security threats	identification of cyber security threats	partial identification of cyber security threats	directed identification of cyber security threats
		justified management of their digital footprint.	informed management of their digital footprint.	management of their digital footprint.	management of aspects of their digital footprint.	directed management of their digital footprint.

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