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| 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.

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| Years 5–6 Australian Curriculum: Design and Technologies achievement standard |
| 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. |
| 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> |

## Years 5–6 Design and Technologies standard elaborations

|  | | A | B | C | D | E |
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|  | | The folio of student work contains evidence of the following: | | | | |
| Knowledge and understanding | Technologies  and society | discerning explanation of how people design products, services and environments to meet the needs of communities, including sustainability | detailed 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 | description of how people design products, services and environments to meet the needs of communities, including sustainability | statement/s about how people design products, services and environments |
| Technologies contexts | discerning 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 | detailed 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 | description 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 | statement/s about the features of technologies for one of more of the 3 prescribed technologies contexts:   * Engineering principles and systems * Food and fibre production; Food specialisations * Materials and technologies specialisations |
| **Processes and production skills** | **Investigating and defining\*** |  |  |  |  |  |
| **Generating and designing** | communication of considered design ideas to an audience including:   * use of technical terms * comprehensive use of graphical representation techniques | communication of effective design ideas to an audience using:   * technical terms * detailed graphical representation techniques | communication of design ideas to an audience using:   * technical terms * graphical representation techniques | communication of superficial design ideas to an audience using:   * technical terms and/or * graphical representation techniques | statement/s about design ideas |
| **Producing and implementing** | proficient 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 | effective 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 aspects 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 fragmented  design solutions for  one of more of the 3 prescribed technologies contexts:   * Engineering principles and systems * Food and fibre production; Food specialisations * Materials and technologies specialisations |
| purposeful selection of technologies and techniques to safely produce designed solutions | effective selection of technologies and techniques to safely produce designed solutions | selection of technologies  and techniques to safely  produce designed solutions | guided selection of technologies and techniques to safely produce designed solutions | directed selection of technologies and techniques to safely produce designed solutions |
| **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

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

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