

Technologies — Design and Technologies

This document outlines assessment techniques and response conditions that could be used to achieve range and balance within an assessment program. Schools should consider the local context, and the age and capabilities of the students, when selecting appropriate assessment techniques, modes and response conditions.

	Techniques		
	Project	Investigation	Examination
Description	focuses on responding to a problem, question, stimulus and/or series of focused tasks within a scenario or context. This may involve using a process to solve a problem, or to inform new actions and/or understandings.	focuses on researching a specific problem, question, issue, or hypothesis through the selection, collection, analysis and/or interpretation of data, sources or information which may result in conclusions. It uses research, investigative practices, or processes in a particular context and occurs over an extended period of time.	focuses on responding independently to seen or unseen assessment item/s under supervised conditions and in a set time frame. Assessment item/s may include question/s, scenario/s, and/or problem/s.
Learning area advice	<p>Students demonstrate and document the use of processes and production skills through the development of a designed solution to solve a need for a prescribed context/s, including:</p> <ul style="list-style-type: none"> • Engineering principles and systems • Food and fibre production • Food specialisations • Materials and technologies specialisations. <p>Design ideas, processes and solutions are created and evaluated against independently developed design criteria that include sustainability.</p>	<p>Students gather information and data that may explore:</p> <ul style="list-style-type: none"> • factors that impact on design decisions • technologies used to design and produce designed solutions for sustainable living • existing or emerging problems • design processes • materials, systems, properties, components, tools and/or equipment. 	<p>Students respond to assessment items including a question/s, scenario/s and/or problem/s that may explore:</p> <ul style="list-style-type: none"> • factors that impact on design decisions • technologies used to design and produce designed solutions for sustainable living • existing or emerging problems • design processes • materials, systems, properties, components, tools and/or equipment. <p>Note:</p> <ul style="list-style-type: none"> • Seen stimulus should be provided with sufficient time for students to adequately engage with the materials prior to the examination. • Unseen stimulus should be information that has not been directly used in class.

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	Additional evidence can be gathered within an assessment task through teacher observation. The teacher observes (views, listens, interprets and records) students' ability to demonstrate the application of their knowledge, understanding and skills when responding to the task. The teacher is required to document evidence of learning against relevant aspects of the achievement standard.		
Mode	written, spoken/signed, practical^ or multimodal	written, spoken/signed, practical^ or multimodal	written or multimodal
Examples	<p>Examples may include:</p> <ul style="list-style-type: none"> • folio, poster or presentation documenting responses to design process stages and/or the designed solution • digital asset (e.g. digital portfolio, slideshow, series of blog posts, video or vlog, computer-aided design drawing) documenting design process stages and/or digital solution • evidence of collaboration and project management (e.g. screenshots of online communication, planning spreadsheet) • designed solution to a real-world problem or scenario. 	<p>Examples may include:</p> <ul style="list-style-type: none"> • research report or journal outlining developed knowledge on the investigated topic • presentation about the investigated topic • digital asset (e.g. online planning document, spreadsheet, digital portfolio, video, slideshow) on the investigated topic. 	<p>Examples may include:</p> <ul style="list-style-type: none"> • multiple choice questions • short response items <ul style="list-style-type: none"> – single word or sentence response items – a paragraph response to a question • extended response items. <p>Examples of stimulus responses may include:</p> <ul style="list-style-type: none"> • explanation of design processes, solutions and/or components • analysis of information and/or data to inform a solution • analysis or critique of an existing or emerging designed solution • response to a design brief <ul style="list-style-type: none"> – visual – graphic • communicating design ideas.

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Conditions						
		<p>Suggested length:*</p> <ul style="list-style-type: none"> written responses that may include graphical representations with annotations 400–600 words spoken/signed responses 3–4 minutes 4–6 A3 pages or equivalent digital media pages that may include graphical representations with annotations designed solution as negotiated practical as negotiated. 	<p>Suggested length:*</p> <ul style="list-style-type: none"> written responses that may include graphical representations 400–600 words spoken/signed responses 3–4 minutes 4–6 A3 pages or equivalent digital media pages that may include graphical representations with annotations designed solution as negotiated practical as negotiated. 	<p>Suggested time:</p> <ul style="list-style-type: none"> up to 90 minutes, plus 10 minutes planning time, under supervised conditions. <p>Suggested length:*</p> <ul style="list-style-type: none"> up to 600 words <ul style="list-style-type: none"> short responses up to 100 words per item extended responses 200–300 words per item 2–3 A3 pages or equivalent digital media pages that may include graphical representations with annotations. 		

* Length of student responses should be considered in the context of the assessment. Longer responses do not necessarily provide better quality evidence of achievement.

^ All practical work must be organised with student safety in mind. Schools must ensure their practices meet current guidelines.



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