

Design Objectives: Years 4 & 5

Objective A: Inquiring and Analysing

At the end of year 5, students should be able to:

- (i) explain and justify the need for a solution to a problem for a specified client/target audience
- (ii) identify and prioritize primary and secondary research needed to develop a solution to the problem
- (iii) analyse a range of existing products that inspire a solution to the problem
- (iv) develop a detailed design brief, which summarizes the analysis of relevant research.

Objective B: Developing Ideas

At the end of year 5, students should be able to:

- (i) develop design specifications, which clearly states the success criteria for the design of a solution
- (ii) develop a range of feasible design ideas, which can be correctly interpreted by others
- (iii) present the chosen design and justify its selection
- (iv) develop accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.

Objective C: Creating the Solution

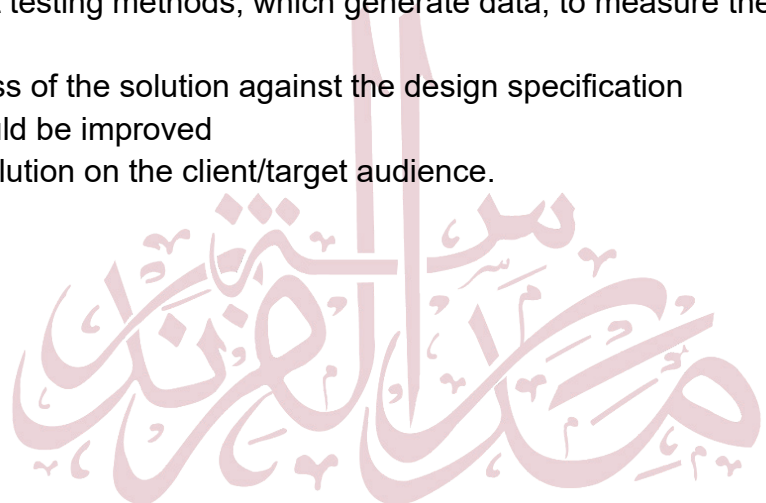
At the end of year 5, students should be able to:

- (i) construct a logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow to create the solution
- (ii) demonstrate excellent technical skills when making the solution
- (iii) follow the plan to create the solution, which functions as intended
- (iv) fully justify changes made to the chosen design and plan when making the solution.

Objective D: Evaluating

At the end of year 5, students should be able to:

- (i) design detailed and relevant testing methods, which generate data, to measure the success of the solution
- (ii) critically evaluate the success of the solution against the design specification
- (iii) explain how the solution could be improved
- (iv) explain the impact of the solution on the client/target audience.



Design Assessment Criteria: Years 4 & 5

Criterion A: Inquiring and Analysing

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> states the need for a solution to a problem for a specified client/target audience develops a basic design brief, which states the findings of relevant research.
3 – 4	The student: <ol style="list-style-type: none"> outlines the need for a solution to a problem for a specified client/target audience outlines a research plan, which identifies primary and secondary research needed to develop a solution to the problem, with some guidance analyses one existing product that inspires a solution to the problem develops a design brief, which outlines the analysis of relevant research.
5 – 6	The student: <ol style="list-style-type: none"> explains the need for a solution to a problem for a specified client/target audience constructs a research plan, which identifies and prioritizes primary and secondary research needed to develop a solution to the problem, with some guidance analyses a range of existing products that inspire a solution to the problem develops a design brief, which explains the analysis of relevant research.
7 – 8	The student: <ol style="list-style-type: none"> explains and justifies the need for a solution to a problem for a client/target audience constructs a detailed research plan, which identifies and prioritizes the primary and secondary research needed to develop a solution to the problem independently analyses a range of existing products that inspire a solution to the problem in detail develops a detailed design brief, which summarizes the analysis of relevant research.

Design Assessment Criteria: Years 4 & 5

Criterion B: Developing Ideas

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> lists some basic design specifications for the design of a solution presents one design, which can be interpreted by others creates incomplete planning drawings/diagrams.
3 – 4	The student: <ol style="list-style-type: none"> lists some design specifications, which relate to the success criteria for the design of a solution presents a few feasible designs, using an appropriate medium(s) or annotation, which can be interpreted by others justifies the selection of the chosen design with reference to the design specification creates planning drawings/diagrams or lists requirements for the creation of the chosen solution.
5 – 6	The student: <ol style="list-style-type: none"> develops design specifications, which outline the success criteria for the design of a solution develops a range of feasible design ideas, using an appropriate medium(s) and annotation, which can be interpreted by others presents the chosen design and justifies its selection with reference to the design specification develops accurate planning drawings/diagrams and lists requirements for the creation of the chosen solution.
7 – 8	The student: <ol style="list-style-type: none"> develops detailed design specifications, which explain the success criteria for the design of a solution based on the analysis of the research develops a range of feasible design ideas, using an appropriate medium(s) and detailed annotation, which can be correctly interpreted by others presents the chosen design and justifies fully and critically its selection with detailed reference to the design specification develops accurate and detailed planning drawings/diagrams and outlines requirements for the creation of the chosen solution.

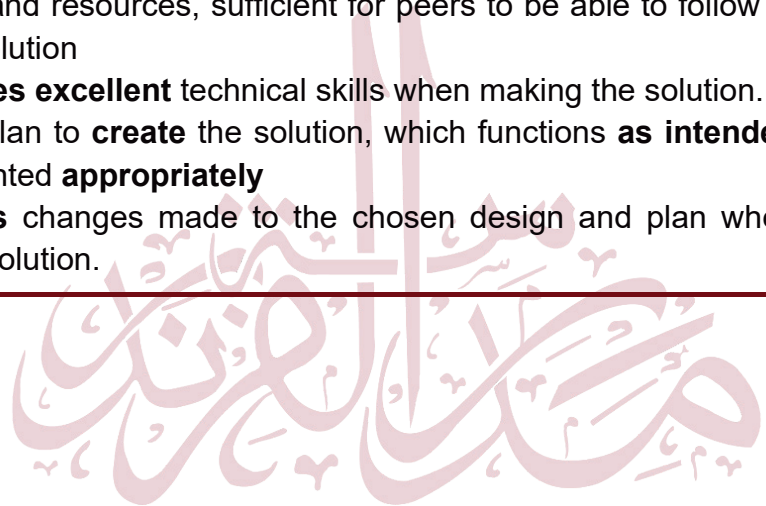


Design Assessment Criteria: Years 4 & 5

Criterion C: Creating the Solution

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> demonstrates minimal technical skills when making the solution creates the solution, which functions poorly and is presented in an incomplete form.
3 – 4	The student: <ol style="list-style-type: none"> constructs a plan that contains some production details, resulting in peers having difficulty following the plan demonstrates satisfactory technical skills when making the solution creates the solution, which partially functions and is adequately presented outlines changes made to the chosen design and plan when making the solution.
5 – 6	The student: <ol style="list-style-type: none"> constructs a logical plan, which considers time and resources, sufficient for peers to be able to follow to create the solution demonstrates competent technical skills when making the solution creates the solution, which functions as intended and is presented appropriately describes changes made to the chosen design and plan when making the solution.
7 – 8	The student: <ol style="list-style-type: none"> constructs a detailed and logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow to create the solution demonstrates excellent technical skills when making the solution. follows the plan to create the solution, which functions as intended and is presented appropriately fully justifies changes made to the chosen design and plan when making the solution.



Design Assessment Criteria: Years 4 & 5

Criterion D: Evaluating

Maximum: 8

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student: <ol style="list-style-type: none"> designs a testing method, which is used to measure the success of the solution states the success of the solution.
3 – 4	The student: <ol style="list-style-type: none"> designs a relevant testing method, which generates data, to measure the success of the solution outlines the success of the solution against the design specification based on relevant product testing outlines how the solution could be improved outlines the impact of the solution on the client/target audience.
5 – 6	The student: <ol style="list-style-type: none"> designs relevant testing methods, which generate data, to measure the success of the solution explains the success of the solution against the design specification based on relevant product testing describes how the solution could be improved explains the impact of the solution on the client/target audience, with guidance.
7 – 8	The student: <ol style="list-style-type: none"> designs detailed and relevant testing methods, which generate data, to measure the success of the solution critically evaluates the success of the solution against the design specification based on authentic product testing explains how the solution could be improved explains the impact of the product on the client/target audience.

