**IB MYP Design Criterion A: Inquiring and Analyzing**

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.

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| **Achievement level** | **Level descriptor** |
| **0** | The student does not reach a standard described by any of the descriptors below. |
| **1–2** | i. **states** the need for a solution to a problem for a specified client/target audience  ii. **develops** a basic design brief, which **states** the **findings** of relevant research. |
| **3–4** | i. **outlines** the need for a solution to a problem for a specified client/target audience  ii. **outlines** a research plan, which **identifies** primary and secondary research needed to **develop** a solution to the problem, **with some guidance**  iii. **analyses one** existing product that inspires a solution to the problem  iv. **develops** a design brief, which **outlines** the analysis of relevant research. |
| **5–6** | i. **explains** the need for a solution to a problem for a specified client/target audience  ii. **constructs** a research plan, which **identifies** and **prioritizes** primary and secondary research needed to **develop** a solution to the problem, **with some guidance**  iii. **analyses a range of** existing products that inspire a solution to the problem  iv. **develops** a design brief, which **explains** the analysis of relevant research. |
| **7–8** | i. **explains** and **justifies** the need for a solution to a problem for a client/ target audience  ii. **constructs** a detailed research plan, which **identifies** and **prioritizes** the primary and secondary research needed to develop a solution to the problem **independently**  iii. **analyses a range of** existing products that inspire a solution to the problem in detail  iv. **develops** a **detailed** design brief, which **explains** the analysis of relevant research. |

**IB MYP Design Criterion B: Developing Ideas**

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.

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| **Achievement level** | **Level descriptor** |
| **0** | The student does not reach a standard described by any of the descriptors below. |
| **1–2** | i. **lists some basic** design specifications for the design of a solution  ii. **presents one** design, which can be interpreted by others  iii. **creates**incomplete planning drawings/diagrams. |
| **3–4** | i. **lists some** design specifications, which relate to the success criteria for the design of a solution  ii. **presents a few** feasible designs, using an appropriate medium(s) **or** annotation, which can be interpreted by others  iii. **justifies** the selection of the chosen design with reference to the design specification  iv. **creates**planning drawings/diagrams or **lists** requirements for the creation of the chosen solution. |
| **5–6** | i. **develops** design specifications, which **outline** the success criteria for the design of a solution  ii. **develops a range of** feasible design ideas, using an appropriate medium(s) **and** annotation, which can be interpreted by others  iii. **presents** the chosen design and **justifies** its selection with reference to the design specification  iv. **develops accurate** planning drawings/diagrams and **lists** requirements for the creation of the chosen solution. |
| **7–8** | i. **develops** detailed design specifications, which **explain** the success criteria for the design of a solution **based on the analysis of the research**  ii. **develops a range** of feasible design ideas, using an appropriate medium(s) and **detailed** annotation, which can be correctly interpreted by others  iii. **presents** the chosen design and **justifies** fully and critically its selection with detailed reference to the design specification  iv. **develops accurate** and **detailed** planning drawings/diagrams and **outlines** requirements for the creation of the chosen solution. |

**IB MYP Design Criterion C: Creating the Solution**

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 a. present the solution as a whole

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| **Achievement level** | **Level descriptor** |
| **0** | The student does not reach a standard described by any of the descriptors below. |
| **1–2** | i. **demonstrates minimal** technical skills when making the solution  ii. **creates**the solution, which functions **poorly** and is presented **in an incomplete form**. |
| **3–4** | i. **constructs a plan** that contains some production details, resulting in peers having difficulty following the plan  ii. **demonstrates satisfactory** technical skills when making the solution  iii. **creates** the solution, which **partially** functions and is **adequately** presented  iv. **outlines**changes made to the chosen design and plan when making the solution. |
| **5–6** | i. **constructs a logical plan**, which considers time and resources, sufficient for peers to be able to follow to create the solution  ii. **demonstrates competent** technical skills when making the solution  iii. **creates** the solution, which functions **as intended** and is presented **appropriately**  iv. **describes**changes made to the chosen design and plan when making the solution. |
| **7–8** | i. **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  ii. **demonstrates excellent** technical skills when making the solution.  iii. follows the plan to **create** the solution, which functions **as intended** and is presented **appropriately**  iv. fully **justifies** changes made to the chosen design and plan when making the solution. |

**IB MYP Design Criterion D: Evaluating**

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.

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| **Achievement level** | **Level descriptor** |
| **0** | The student does not reach a standard described by any of the descriptors below. |
| **1–2** | i. **designs a** testing **method**, which is used to measure the success of the solution  ii. **states**the success of the solution. |
| **3–4** | i. **designs a relevant** testing **method**, which generates data, to measure the success of the solution  ii. **outlines** the success of the solution against the design specification based on **relevant** product testing  iii. **outlines** how the solution could be improved  iv. **outlines** the impact of the solution on the client/target audience. |
| **5–6** | i. **designs relevant** testing **methods**, which generate data, to measure the success of the solution  ii. **explains** the success of the solution against the design specification based on **relevant** product testing  iii. **describes** how the solution could be improved  iv. **explains** the impact of the solution on the client/target audience, **with guidance**. |
| **7–8** | i. **designs detailed and relevant** testing **methods**, which generate data, to measure the success of the solution  ii. critically **evaluates** the success of the solution against the design specification based on **authentic** product testing  iii. **explains** how the solution could be improved  iv. **explains** the impact of the product on the client/target audience. |