# Chapter: Assessment Criteria (MYP Year 5 Design)

*Technology & Innovation – MYP Grade 10 Design (Group 8)*

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## Introduction

In the International Baccalaureate Middle Years Programme (MYP), Design is a dynamic subject that encourages students to solve problems through creative thinking, research, and the development of practical and innovative solutions. In **Year 5 (Grade 10)**, students are expected to deepen their understanding of the design cycle and apply it with increasing sophistication.

This chapter explores the **four key assessment criteria** used in MYP Year 5 Design and how they align with the broader theme of **Technology & Innovation**. Understanding these criteria is essential for students to reflect, plan, and deliver high-quality design work. By mastering these criteria, learners will be better equipped to create solutions that address real-world problems using innovative thinking and technological fluency.

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## The Four Assessment Criteria in MYP Year 5 Design

Each design project is assessed using **four criteria**, each scored from **0 to 8**, for a total possible score of **32 points**. These criteria guide both teaching and learning, helping students understand what high-quality work looks like.

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### Criterion A: Inquiring and Analysing

**Objective**: Students should be able to explain and justify the need for a solution to a problem and identify and prioritize primary and secondary research to develop a detailed design brief.

**Key Elements**:

1. **Explain and justify the need** for a solution to a problem.
2. **Identify and prioritize research** to help develop a clear understanding of the context.
3. **Analyse similar existing products** to inspire and inform the design.
4. **Develop a detailed design brief** that outlines the purpose, requirements, and context of the solution.

**How it ties into Technology & Innovation**:
Students use research tools, digital libraries, and analytical frameworks to investigate current technologies. They also evaluate existing innovations to understand gaps and opportunities for improvement.

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## Criterion B: Developing Ideas

**Objective**: Students should be able to develop feasible, creative ideas that are informed by research and presented clearly through a series of drawings, models, or prototypes.

**Key Elements**:

1. **Develop design specifications** based on analysis of the research.
2. **Develop a range of ideas** that are creative and suitable to the problem.
3. **Present the chosen design** in detail using appropriate technical drawings, CAD tools, or 3D models.
4. **Create accurate planning materials** that outline the process of developing the product or solution.

**Technology & Innovation Angle**:
Students often use digital tools such as computer-aided design (CAD) software, 3D printing, and modeling software. They are encouraged to think outside the box and apply innovative methods in ideation and prototyping.

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## Criterion C: Creating the Solution

**Objective**: Students should demonstrate technical skills in making a product and follow a logical plan to produce a functional solution that meets the design specifications.

**Key Elements**:

1. **Construct a logical plan** for creating the solution, including materials and resources.
2. **Demonstrate excellent technical skills** and craftsmanship.
3. **Follow the plan to create the solution**, making necessary modifications where needed.
4. **Ensure the final solution is functional and meets the specifications** outlined earlier.

**Innovation in Practice**:
The making process may involve using emerging technologies like robotics kits, IoT tools, Arduino boards, or digital fabrication methods. Innovation is assessed not just in the product but also in the process of creation.

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## Criterion D: Evaluating

**Objective**: Students should be able to test and evaluate their solution against the design specifications and reflect on its impact and future improvements.

**Key Elements**:

1. **Design tests to evaluate** the success of the solution.
2. **Evaluate the success of the solution** against the original design specifications.
3. **Explain how the solution could be improved** and enhanced.
4. **Reflect on the impact of the solution** on the target audience or environment.

**Focus on Technological Impact**:
Evaluation should include discussion of ethical, social, and environmental considerations—how the solution affects users, communities, or the world. This includes sustainability, accessibility, and responsible use of technology.

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## Grading Scale Example (for each Criterion)

| Level | Descriptor Summary (General) |
|---|---|
| 0 | Does not reach a standard described by any of the descriptors. |
| 1–2 | Minimal achievement; work is underdeveloped and incomplete. |
| 3–4 | Basic understanding; some clarity and logic in parts. |
| 5–6 | Competent performance; appropriate detail and explanation. |
| 7–8 | High-quality work; consistent and thorough, showing insight. |

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## Summary

Assessment in MYP Year 5 Design is structured to empower students to become **problem solvers, critical thinkers, and responsible innovators**. Through the four criteria—**Inquiring and Analysing, Developing Ideas, Creating the Solution, and Evaluating**—

students are guided through a design thinking process that mirrors the work of professionals in real-world technology and innovation fields.

Each criterion pushes students to develop key skills: from conducting thorough research and generating creative ideas, to building and refining functional prototypes and reflecting on the outcome. The assessment framework ensures that students not only learn how to create but also how to think critically about the *why*, *how*, and *for whom* of their designs.

In the context of **Technology & Innovation**, this assessment framework enables students to harness digital tools, explore new possibilities, and design with empathy and foresight—building a foundation for future careers in engineering, design, sustainability, and beyond.

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