

MYP Design

Course description and aims

Design, and the resultant development of new technologies, has given rise to profound changes in society, transforming how we access and process information, adapt our environment, communicate with others, solve problems, work and live. MYP design challenges students to apply practical and creative-thinking skills to solve design problems; encourages students to explore the role of design in historical and contemporary contexts; and raises students' awareness of their responsibilities when making design decisions and taking action. Inquiry and problem-solving are at the heart of design.

MYP design requires the use of the design cycle as a tool, which provides: the methodology to structure the inquiry and analyse problems; the development of feasible solutions; the creation of solutions; and the testing and evaluation of the solution. In MYP design, a solution can be a model, prototype, product or system independently created and developed by students. MYP design enables students to develop not only practical skills but also strategies for creative and critical thinking.

The aims of MYP design are to encourage and enable students to:

- enjoy the design process, and develop an appreciation of its elegance and power
- develop knowledge, understanding and skills from different disciplines to design and create solutions to problems using the design cycle
- use and apply technology effectively as a means to access, process and communicate information, model and create solutions, and to solve problems
- develop an appreciation of the impact of design innovations for life, global society and environments
- appreciate past, present and emerging design within cultural, political, social, historical and environmental contexts
- develop respect for others' viewpoints and appreciate alternative solutions to problems
- act with integrity and honesty, and take responsibility for their own actions developing effective working practices.

Curriculum overview

The MYP promotes sustained inquiry in design by developing conceptual understanding within global contexts.



DELEDDA INTERNATIONAL SCHOOL

Key concepts such as *communication, communities, development and systems* broadly frame the MYP curriculum.

Related concepts promote deeper learning grounded in specific disciplines. Examples of related concepts in MYP design include *adaptation*, *ergonomics*, *sustainability and innovation*. Students explore key and related concepts through MYP **global contexts**

- Identities and relationships
- Orientation in space and time
- Personal and cultural expression
- Scientific and technical innovation
- Globalization and sustainability
- Fairness and development

Assessment criteria

Each design objective corresponds to one of four equally weighted assessment criteria. Each criterion has eight possible achievement levels (1–8), divided into four bands with unique descriptors that teachers use to make judgments about students' work.

Criterion A:Inquiring and analysing Students are presented with a design situation, from which they identify a problem that needs to be solved. They analyse the need for a solution and conduct an inquiry into the nature of the problem.

Criterion B Developing ideas Students write a detailed specification, which drives the development of a solution. They present the solution.

Criterion C: Creating the solution Students plan the creation of the chosen solution, then follow the plan to create a prototype sufficient for testing and evaluation.

Criterion D: Evaluating Students design tests to evaluate the solution, carry out those tests and objectively evaluate its success. Students identify areas where the solution could be improved and explain how their solution will impact on the client or target audience.

"Myp-brief Design 2015" Ibo.org. IBO, 2015. Web. 28 Apr. 2019