

OBJECTIVES

- Language and literature
- Language Acquisition
- Individual and societies
- Mathematics
- Sciences
- Arts
- Physical and health education
- Design

Language and literature

A Analysing

Through the study of language and literature students are enabled to deconstruct texts in order to identify their essential elements and their meaning. Analysing involves demonstrating an understanding of the creator's choices, the relationship between the various components of a text and between texts, and making inferences about how an audience responds to a text (strand i), as well as the creator's purpose for producing text (strand ii). Students should be able to use the text to support their personal responses and ideas (strand iii). Literacy and critical literacy are essential lifelong skills; engaging with texts requires students to think critically and show awareness of, and an ability to reflect on, different perspectives through their interpretations of the text (strand iv).

In order to reach the aims of language and literature, students should be able to:

- i. analyse the content, context, language, structure, technique and style of text(s) and the relationship among texts
- ii. analyse the effects of the creator's choices on an audience justify opinions and ideas, using examples, explanations and terminology
- iii. justify opinions and ideas, using examples, explanations and terminology
- iv. evaluate similarities and differences by connecting features across and within genres and texts.

B Organizing

Students should understand and be able to organize their ideas and opinions using a range of appropriate conventions for different forms and purposes of communication. Students should also recognize the importance of maintaining academic honesty by respecting intellectual property rights and referencing all sources accurately.

In order to reach the aims of language and literature, students should be able to:

- i. employ organizational structures that serve the context and intention
- ii. organize opinions and ideas in a sustained, coherent and logical manner
- iii. use referencing and formatting tools to create a presentation style suitable to the context and intention.

C Producing text

Students will produce written and spoken text, focusing on the creative process itself and on the understanding of the connection between the creator and his or her audience. In exploring and appreciating new and changing perspectives and ideas, students will develop the ability to make choices aimed at producing texts that affect both the creator and the audience.

In order to reach the aims of language and literature, students should be able to:

- i. produce texts that demonstrate insight, imagination and sensitivity while

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exploring and reflecting critically on new perspectives and ideas arising from personal engagement with the creative process

- ii. make stylistic choices in terms of linguistic, literary and visual devices, demonstrating awareness of impact on an audience
- iii. select relevant details and examples to develop ideas.

D Using language

Students have opportunities to develop, organize and express themselves and communicate thoughts, ideas and information. They are required to use accurate and varied language that is appropriate to the context and intention. This objective applies to, and must include, written, oral and visual text, as appropriate.

In order to reach the aims of language and literature, students should be able to:

- i. use appropriate and varied vocabulary, sentence structures and forms of expression
- ii. write and speak in a register and style that serve the context and intention
- iii. use correct grammar, syntax and punctuation
- iv. spell (alphabetic languages), write (character languages) and pronounce with accuracy
- v. use appropriate non-verbal communication techniques.

Language Acquisition

A Comprehending spoken and visual text

Comprehending spoken and visual text encompasses aspects of listening and viewing, and involves the student in interpreting and constructing meaning from spoken and visual text to understand how images presented with oral text interplay to convey ideas, values and attitudes. Engaging with text requires the student to think creatively and critically about what is viewed, and to be aware of opinions, attitudes and cultural references presented in the visual text. The student might, for example, reflect on feelings and actions, imagine himself or herself in another's situation, gain new perspectives and develop empathy, based on what he or she has understood in the text.

In order to reach the aims of language acquisition, as appropriate to the phase, students should be able to:

- i. listen for specific purposes and respond to show understanding
- ii. interpret visual text that is presented with spoken text
- iii. engage with the text by supporting opinion and personal response with evidence and examples from the text.

B Comprehending written and visual text

Comprehending written and visual text encompasses aspects of reading and viewing, and involves the student in constructing meaning and interpreting written and visual text to understand how images presented with written text interplay to convey ideas, values and attitudes. Engaging with text requires the student to think creatively and critically about what is read and viewed, and to be aware of opinions, attitudes and cultural references presented in the written and/or visual text. The student might, for example, reflect on feelings and actions, imagine himself or herself in another's situation, gain new perspectives and develop empathy, based on what he or she has understood in the text.

In order to reach the aims of language acquisition, as appropriate to the phase, students should be able to:

- i. read for specific purposes and respond to show understanding
- ii. interpret visual text that is presented with written text
- iii. engage with the text by supporting opinion and personal response with evidence and examples from the text.

C Communicating in response to spoken and/or written and/or visual text

In the language acquisition classroom, students will have opportunities to develop their communication skills by interacting on a range of topics of personal, local and global interest and significance, and responding to spoken, written and visual text in the target language.

Language Acquisition

In order to reach the aims of language acquisition, as appropriate to the phase, students should be able to:

- i. interact and communicate in various situations
- ii. express thoughts, feelings, ideas, opinions and information in spoken and written form
- iii. speak and write for specific purposes.

D Using language in spoken and/or written form

This objective relates to the correct and appropriate use of the spoken and written target language. It involves recognizing and using language suitable to the audience and purpose, for example, the language used at home, the language of the classroom, formal and informal exchanges, social and academic language. When speaking and writing in the target language, students apply their understanding of linguistic and literary concepts to develop a variety of structures, strategies (spelling, grammar, plot, character, punctuation, voice) and techniques with increasing skill and effectiveness.

In order to reach the aims of language acquisition, as appropriate to the phase, students should be able to:

- i. organize thoughts, feelings, ideas, opinions and information in spoken and written form
- ii. develop accuracy when speaking and writing in the target language.

Individual and societies

A Knowing and understanding

Students develop factual and conceptual knowledge about individuals and societies.

In order to reach the aims of individuals and societies, students should be able to:

- i. use terminology in context
- ii. demonstrate knowledge and understanding of subject-specific content and concepts through descriptions, explanations and examples.

B Investigating

Students develop systematic research skills and processes associated with disciplines in the humanities and social sciences. Students develop successful strategies for investigating independently and in collaboration with others.

In order to reach the aims of individuals and societies, students should be able to:

- i. formulate a clear and focused research question and justify its relevance
- ii. formulate and follow an action plan to investigate a research question
- iii. use research methods to collect and record relevant information
- iv. evaluate the process and results of the investigation.

C Communicating

Students develop skills to organize, document and communicate their learning using a variety of media and presentation formats.

In order to reach the aims of individuals and societies, students should be able to:

- i. communicate information and ideas using an appropriate style for the audience and purpose
- ii. structure information and ideas in a way that is appropriate to the specified format
- iii. document sources of information using a recognized convention.

D Thinking critically

Students use critical thinking skills to develop and apply their understanding of individuals and societies and the process of investigation.

In order to reach the aims of individuals and societies, students should be able to:

- i. discuss concepts, issues, models, visual representation and theories
- ii. synthesize information to make valid arguments
- iii. analyse and evaluate a range of sources/data in terms of origin and purpose, examining value and limitations
- iv. interpret different perspectives and their implications.

Mathematics

A. Knowing and understanding

Knowledge and understanding are fundamental to studying mathematics and form the base from which to explore concepts and develop skills. This objective assesses the extent to which students can select and apply mathematics to solve problems in both familiar and unfamiliar situations in a variety of contexts.

This objective requires students to demonstrate knowledge and understanding of the concepts and skills of the four branches in the prescribed framework (number, algebra, geometry and trigonometry, statistics and probability).

In order to reach the aims of mathematics, students should be able to:

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations
- ii. apply the selected mathematics successfully when solving problems
- iii. solve problems correctly in a variety of contexts.

B. Investigating patterns

Investigating patterns allows students to experience the excitement and satisfaction of mathematical discovery. Working through investigations encourages students to become risk-takers, inquirers and critical thinkers. The ability to inquire is invaluable in the MYP and contributes to lifelong learning.

A task that does not allow students to select a problem-solving technique is too guided and should result in students earning a maximum achievement level of 6 (for years 1 and 2) and a maximum achievement level of 4 (for year 3 and up). However, teachers should give enough direction to ensure that all students can begin the investigation.

For year 3 and up, a student who describes a general rule consistent with incorrect findings will be able to achieve a maximum achievement level of 6, provided that the rule is of an equivalent level of complexity.

In order to reach the aims of mathematics, students should be able to:

- i. select and apply mathematical problem-solving techniques to discover complex patterns
- ii. describe patterns as general rules consistent with findings
- iii. prove, or verify and justify, general rules.

C. Communicating

Mathematics provides a powerful and universal language. Students are expected to use appropriate mathematical language and different forms of representation when

Mathematics

communicating mathematical ideas, reasoning and findings, both orally and in writing.

In order to reach the aims of mathematics, students should be able to:

- i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations
- ii. use appropriate forms of mathematical representation to present information
- iii. move between different forms of mathematical representation
- iv. communicate complete, coherent and concise mathematical lines of reasoning
- v. organize information using a logical structure.

D. Applying mathematics in real-life contexts

MYP mathematics encourages students to see mathematics as a tool for solving problems in an authentic real-life context. Students are expected to transfer theoretical mathematical knowledge into real-world situations and apply appropriate problem-solving strategies, draw valid conclusions and reflect upon their results.

In order to reach the aims of mathematics, students should be able to:

- i. identify relevant elements of authentic real-life situations
- ii. select appropriate mathematical strategies when solving authentic real-life situations
- iii. apply the selected mathematical strategies successfully to reach a solution
- iv. justify the degree of accuracy of a solution
- v. justify whether a solution makes sense in the context of the authentic real-life situation.

Sciences

A Knowing and understanding

Students develop scientific knowledge (facts, ideas, concepts, processes, laws, principles, models and theories) and apply it to solve problems and express scientifically supported judgments.

Tests or exams must be assessed using this objective. To reach the highest level students must make scientifically supported judgments about the validity and/or quality of the information presented to them. Assessment tasks could include questions dealing with “scientific claims” presented in media articles, or the results and conclusions from experiments carried out by others, or any question that challenges students to analyse and examine the information and allows them to outline arguments about its validity and/or quality using their knowledge and understanding of science.

In order to reach the aims of sciences, students should be able to:

- i. explain scientific knowledge
- ii. apply scientific knowledge and understanding to solve problems set in familiar and unfamiliar situations
- iii. analyse and evaluate information to make scientifically supported judgments.

B Inquiring and designing

Intellectual and practical skills are developed through designing, analysing and performing scientific investigations. Although the scientific method involves a wide variety of approaches, the MYP emphasizes experimental work and scientific inquiry.

When students design a scientific investigation they should develop a method that will allow them to collect sufficient data so that the problem or question can be answered. To enable students to design scientific investigations independently, teachers must provide an open-ended problem to investigate. An open-ended problem is one that has several independent variables appropriate for the investigation and has sufficient scope to identify both independent and controlled variables. In order to achieve the highest level for the strand in which students are asked to design a logical, complete and safe method, the student would include only the relevant information, correctly sequenced.

In order to reach the aims of sciences, students should be able to:

- i. explain a problem or question to be tested by a scientific investigation
- ii. formulate a testable hypothesis and explain it using scientific reasoning
- iii. explain how to manipulate the variables, and explain how data will be collected
- iv. design scientific investigations.

Sciences

C Processing and evaluating

Students collect, process and interpret qualitative and/or quantitative data, and explain conclusions that have been appropriately reached. MYP sciences helps students to develop analytical thinking skills, which they can use to evaluate the method and discuss possible improvements or extensions.

In order to reach the aims of sciences, students should be able to:

- i. present collected and transformed data
- ii. interpret data and explain results using scientific reasoning
- iii. evaluate the validity of a hypothesis based on the outcome of the scientific investigation
- iv. evaluate the validity of the method
- v. explain improvements or extensions to the method.

D Reflecting on the impacts of science

Students gain global understanding of science by evaluating the implications of scientific developments and their applications to a specific problem or issue. Varied scientific language will be applied in order to demonstrate understanding. Students are expected to become aware of the importance of documenting the work of others when communicating in science.

Students must reflect on the implications of using science, interacting with one of the following factors: moral, ethical, social, economic, political, cultural or environmental, as appropriate to the task. The student's chosen factor may be interrelated with other factors.

In order to reach the aims of sciences, students should be able to:

- i. explain the ways in which science is applied and used to address a specific problem or issue
- ii. discuss and evaluate the various implications of the use of science and its application in solving a specific problem or issue
- iii. apply scientific language effectively
- iv. document the work of others and sources of information used.

Arts

A Knowing and understanding

Through the study of theorists and practitioners of the arts, students discover the aesthetics of art forms and are able to analyse and communicate in specialized language. Using explicit and tacit knowledge alongside an understanding of the role of the arts in a global context, students inform their work and artistic perspectives.

In order to reach the aims of arts, students should be able to:

- i. demonstrate knowledge and understanding of the art form studied, including concepts, processes, and the use of subject-specific terminology
- ii. demonstrate an understanding of the role of the art form in original or displaced contexts
- iii. use acquired knowledge to purposefully inform artistic decisions in the process of creating artwork.

B Developing skills

The acquisition and development of skills provide the opportunity for active participation in the art form and in the process of creating art. Skill application allows students to develop their artistic ideas to a point of realization. The point of realization could take many forms. However, it is recognized as the moment when the student makes a final commitment to his or her artwork by presenting it to an audience. Skills are evident in both process **and** product.

In order to reach the aims of arts, students should be able to:

- i. demonstrate the acquisition and development of the skills and techniques of the art form studied
- ii. demonstrate the application of skills and techniques to create, perform and/or present art.

C Thinking creatively

The arts motivate students to develop curiosity and purposefully explore and challenge boundaries. Thinking creatively encourages students to explore the unfamiliar and experiment in innovative ways to develop their artistic intentions, their processes and their work. Thinking creatively enables students to discover their personal signature and realize their artistic identity.

In order to reach the aims of arts, students should be able to:

- i. develop a feasible, clear, imaginative and coherent artistic intention
- ii. demonstrate a range and depth of creative-thinking behaviours
- iii. demonstrate the exploration of ideas to shape artistic intention through to a point of realization.

Arts

D Responding

Students should have the opportunity to respond to their world, to their own art and to the art of others. A response can come in many forms; creating art as a response encourages students to make connections and transfer their learning to new settings. Through reflecting on their artistic intention and the impact of their work on an audience and on themselves, students become more aware of their own artistic development and the role that arts play in their lives and in the world. Students learn that the arts may initiate change as well as being a response to change.

In order to reach the aims of arts, students should be able to:

- i. construct meaning and transfer learning to new settings
- ii. create an artistic response that intends to reflect or impact on the world around them
- iii. critique the artwork of self and others

Physical and health education

A Knowing and understanding

Students develop knowledge and understanding about health and physical activity in order to identify and solve problems.

In order to reach the aims of physical and health education, students should be able to:

- i. explain physical and health education factual, procedural and conceptual knowledge
- ii. apply physical and health education knowledge to analyse issues and solve problems set in familiar and unfamiliar situations
- iii. apply physical and health terminology effectively to communicate understanding.

B Planning for performance

Students through inquiry design, analyse, evaluate and perform a plan in order to improve performance in physical and health education.

In order to reach the aims of physical and health education, students should be able to:

- i. design, explain and justify plans to improve physical performance and health
- ii. analyse and evaluate the effectiveness of a plan based on the outcome.

C Applying and performing

Students develop and apply practical skills, techniques, strategies and movement concepts through their participation in a variety of physical activities.

In order to reach the aims of physical and health education, students should be able to:

- i. demonstrate and apply a range of skills and techniques effectively
- ii. demonstrate and apply a range of strategies and movement concepts effectively
- iii. analyse and apply information to perform effectively.

D Reflecting and improving performance

Students enhance their personal and social development, set goals, take responsible action and reflect on their performance and the performance of others.

In order to reach the aims of physical and health education, students should be able to:

- i. explain and demonstrate strategies that enhance interpersonal skills
- ii. develop goals and apply strategies to enhance performance
- iii. analyse and evaluate performance.

Design

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.

In order to reach the aims of design, 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 the 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.

B Developing ideas

Students write a detailed specification, which drives the development of a solution. They present the solution.

In order to reach the aims of design, students should be able to:

- i. develop a design specification 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 final 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.

C Creating the solution

Students plan the creation of the chosen solution and follow the plan to create a prototype sufficient for testing and evaluation.

In order to reach the aims of design, 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
- v. present the solution as a whole, either:
 - a. in electronic form, or

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- b. through photographs of the solution from different angles, showing details.

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.

In order to reach the aims of design, 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.