OBJECTIVES

Language and literature

Language acquisition

Individual and societies

Mathematics

Sciences

Arts

Physical and health education

Design

Language and literature

The objectives of any MYP subject group state the specific targets that are set for learning in the subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP language and literature encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge.

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

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 the 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 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

The objectives of any MYP subject state the specific targets that are set for learning in the subject. They define what the student will be able to accomplish as a result of studying the subject. MYP language acquisition encompasses the factual, conceptual, procedural and metacognitive dimensions of knowledge. The student's knowledge and understanding will be developed through:

• learning language

• learning through language

• learning about language (Halliday 1985).

This, in turn, helps students learn how to learn. The cognitive, linguistic and sociocultural aspects of communication are intertwined in each of the four objectives. The student is expected to develop the competencies to communicate appropriately, accurately and effectively in an increasing range of social, cultural and academic contexts, and for an increasing variety of purposes.

The language acquisition subject-group objectives represent some of the essential processes of language and have been organized under four communicative processes. They are as follows.

A Listening

B Reading

C Speaking

D Writing

Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation. The strands are subsets of each whole objective and must be considered when planning, teaching, assessing and reporting on the student's language development and communicative competence. These aspects focus on purpose, context, language control, accuracy and fluency. All strands in each objective should be addressed through the units planned for each phase of the course, at a conceptually and linguistically appropriate level for the student. All strands of the unit's objectives should also be addressed in the task(s) that are part of that unit.

A Listening

Comprehending spoken language presented in multimodal text encompasses aspects of listening and viewing. The process involves the student in interpreting and constructing meaning from spoken and multimodal text to understand how images and other spatial aspects 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 themself in another's situation, or gain new perspectives and develop empathy, based on what they have understood in the text.

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

• demonstrate understanding of explicit and implicit spoken information in multimodal texts

What is the content of the text? What details in the spoken language relate to the big ideas and explicit features of the multimodal text? (message: literal (explicit) and implicit)

• demonstrate understanding of conventions

What language conventions can be heard? For example, form of address, greetings.

What behavioural conventions can be seen? For example, dress code, gestures—shaking hands, bowing.

• demonstrate understanding of relationships between the various components of the multimodal texts

What are the relationships between the various components of the multimodal texts? Do they share the same context?

B Reading

Comprehending written language presented with multimodal text encompasses aspects of reading and viewing. It involves the student in constructing meaning and interpreting written, spatial and visual aspects of texts 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 text. The student might, for example, reflect on feelings and actions, imagine themself in another's situation, gain new perspectives and develop empathy, based on what they have understood in the text.

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

• demonstrate understanding of explicit and implicit written information in multimodal texts

What is the content?

What details in the written language relate to the big ideas and explicit features of the multimodal text? (message: literal/explicit, implicit)

• demonstrate understanding of conventions

What is the text type?

What are the language conventions used in the multimodal text? For example, formal and informal language, punctuation, word choice.

What is the communicative purpose of the text?

Who is the intended audience?

What text conventions are used in the multimodal text? For example, use of colour, structure, format—layout and physical organization of the text.

• demonstrate understanding of relationships between the various components of the multimodal texts

Do they share the same context?

C Speaking

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, with the support of spoken, written and visual texts in the target language (multimodal texts). When speaking in the target language, students apply their understanding of linguistic and literary concepts to develop a variety of structures, strategies and techniques with increasing skill and effectiveness. This is the use of the language system, including their use of grammar, pronunciation and vocabulary.

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

• use spoken language to communicate and interact with others

What is the role of the student/speaker?

What is the context?

Who is the audience?

What is the purpose of the interaction?

What is the message?

• demonstrate accuracy and fluency in speaking

How accurately is the language used?

To what extent is the conversation language intelligible?

• communicate clearly and effectively

How well does the student communicate information?

How accurately and fluently are the relevant information and ideas communicated?

D Writing

This objective relates to the correct and appropriate use of the 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, and social and academic language. When writing in the target language, students apply their understanding of language, form, mode, medium and literary concepts to express ideas, values and opinions in creative and meaningful ways. They develop a variety of structures using

strategies (spelling, grammar, plot, character, punctuation, voice, format, audience) and techniques with increasing skill and effectiveness.

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

• use written language to communicate with others

What is the role of the student/writer?

Who is the audience?

What is the purpose of the written text?

What is the message?

• demonstrate accurate use of language conventions

How accurately is the language used?

To what extent is the language comprehensible?

• organize information in writing

Does the student use an appropriate format?

To what extent are the cohesive devices used in the organization of the text?

• communicate information with a sense of audience and purpose.

How are the relevant information and ideas communicated?

How well does the student communicate such that the text makes sense to the reader?

Individuals and societies

The objectives of any MYP subject group state the specific targets that are set for learning in that subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP individuals and societies encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge.

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

The objectives of any MYP subject group state the specific targets that are set for learning in the subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP mathematics encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation. These objectives relate directly to the assessment criteria.

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 (numerical and abstract reasoning, thinking with models, spatial reasoning, and reasoning with data).

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 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. and justify, general rules.

Sciences

The objectives of any MYP subject group state the specific targets that are set for learning in that subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP science courses encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation.

These objectives relate directly to the assessment criteria. Together these objectives reflect the holistic nature of science and the real-world work of scientists. They enable students to engage with all aspects of science, either through individual objectives or connected processes.

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.

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

The objectives of any MYP subject group state the specific targets that are set for learning in the subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP arts encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge, and provide explicit focus on the four areas that lie at the heart of an arts education.

MYP arts objectives Learning and assessment objectives:

Learning about the arts Objective A: Investigating

Learning through the arts Objective B: Developing

Creating and/or performing art Objective C: Creating/Performing

Evaluating one's own art and one's development as an artist Objective D: Evaluating

Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation. These objectives relate directly to the assessment criteria.

The four objectives can be considered as dynamic, interrelated and integrated elements of an arts process. They can also be used sequentially in the planning of units of work and in the creation/performance of artworks. However, for the purpose of learning and teaching, and in the development of units, the strands do not need to be covered in any particular sequence or order. It is important to note that investigating, for example, is also part of developing, of creating/performing, as well as being key to evaluating.

A Investigating

Through the study of art movements or genres and artworks/performances, students come to understand and appreciate the arts. They use and further develop their research skills to draw on a range of sources, understanding that, in the arts, sources are not limited to texts; they can also include audio and video recordings, images and musical notation. All sources used must be referenced in accordance with the school's academic integrity policy.

Students use and further develop information literacy skills to evaluate and select relevant information about the art movements or genres and artworks/performances. While contextual information should be included, the focus of the investigation is the art genre or movement and artworks/performances, not extensive biographical information about artists. Students learn how to critique the artworks/performances of others and to communicate in subject-specific language or terminology; this will be important in order to access the higher levels in criterion A ii.

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

i. investigate a movement(s) or genre(s) in their chosen arts discipline, related to the statement of inquiry

ii. critique an artwork or performance from the chosen movement(s) or genre(s).

B Developing

Development of ideas through practical exploration provides the opportunity for active participation in the art form. Practical exploration requires students to acquire and develop skills/techniques and to experiment with the art form. Evidence of practical exploration cannot be limited to written form; for example, if a student is composing music, evidence should include musical notation and/or audio recordings; if a student is creating a piece of theatre, evidence should include script extracts and/or video recordings. To achieve the higher levels in criterion B i, students must evidence extensive and varied practical exploration and refinement of their idea(s). Students use both practical exploration and knowledge and understanding of art and artworks to purposefully inform artistic decisions.

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

i. practically explore ideas to inform development of a final artwork or performance

ii. present a clear artistic intention for the final artwork or performance in line with the statement of inquiry.

C Creating/Performing

The acquisition and development of skills is evident in both process and outcome. Formative assessment supports students' acquisition and development of skills and techniques in the process stage. The students' command of skills and techniques is demonstrated through the creation or performance of a finalized artwork that is summatively assessed.

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

i. create or perform an artwork.

D Evaluating

MYP arts promote the development and application of reflection and critical-thinking skills so that students become reflective practitioners. Through reflecting on their work and on themselves, students become more aware of their own artistic development and the role that the arts play in their lives and in the world.

When evaluating their own artwork or performance, students should consider elements, techniques and context. The arts process journal should be used throughout the process stage to keep a record of reflections that students can refer to when developing the final reflection. Development as an artist includes development of personal skills, such as affective skills and problem-solving skills, as well as development of artistic skills and techniques. Students' reflections should answer the questions: "What have I learned that can be taken forward and applied to other projects?" and "What would I do differently if I did this project again?"

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

i. appraise their own artwork or performance
ii. reflect on their development as an artist.

Physical and health education

The objectives of any MYP subject group state the specific targets that are set for learning in the subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP physical and health education encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation. These objectives relate directly to the assessment criteria.

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. develop goals to enhance performance

ii. design, explain and justify a plan to improve physical performance and health.

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 to enhance interpersonal skills

ii. analyse and evaluate the effectiveness of a plan based on the outcome

iii. analyse and evaluate performance.

Design

The objectives of any MYP subject group state the specific targets that are set for learning in that subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP design encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation. These objectives relate directly to the assessment criteria.

Together these objectives reflect the knowledge, skills and attitudes that students need in order to engage with and solve complex, real-life problems in both familiar and unfamiliar contexts; they represent essential aspects of design methodology.

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.

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.