



Education for life

The International Baccalaureate Organization (IBO), a non-profit educational foundation based in Geneva, Switzerland, offers the Diploma Programme for students in the final two years of school aged 16 to 19, the Middle Years Programme for students in the 11-16 age range, and the Primary Years Programme for students aged 3 to 12 years.



The IBO has authorized some 1,300 schools in II0 countries to teach these programmes. In

addition, the organization provides curriculum and assessment development, teacher-training and information seminars, electronic networking and other educational services to these schools.

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The Middle Years

P R O G R A M M E









The Middle Years Programme (MYP) is designed for students between the ages of 11 and 16. This period, encompassing early puberty and mid-adolescence, is a particularly critical phase of personal and intellectual development. Such a time of uncertainty, sensitivity, susceptibility, resistance and questioning requires an educational programme that will help students develop the knowledge, attitudes and skills they need to participate actively and responsibly in a changing and increasingly interrelated world. In so doing, learning how to learn and how to evaluate information critically is as important as the content of the disciplines themselves.

The IBO is keenly interested in the development of ethics and values in young people. Not willing to prescribe for all the moral code of any one group, the IBO nonetheless is concerned that students develop a personal value system by which to guide their own lives as decent and thoughtful members of local communities and the world beyond.

UNIQUE

Characteristics

Holistic learning

The Middle Years Programme (MYP) offers an approach to teaching and learning that embraces yet transcends the focus on traditional school subjects. While insisting upon thorough study of the various disciplines, the



appropriate language, good communication is also about listening to what others have to say and being attuned to intentions, variations and nuance. The MYP also encourages students to explore multiple forms of expression.

MYP accentuates the interrelatedness of them and so advances a *holistic* view of learning. This perspective asks the student to consider issues and problems in their widest scope and to realize that good solutions often draw upon insights one has acquired from many sources. This means helping students recognize relationships between school subjects and the world outside, and learn to combine relevant knowledge, experience and critical thinking to solve authentic problems.

Intercultural awareness

As an international organization, the IBO is unapologetically idealistic in believing that education can foster understanding among young people around the world, enabling future generations to live more peacefully and productively than we do today. *Intercultural awareness* is concerned with developing students' attitudes, knowledge and skills as they learn about their own and others' social and national cultures. By encouraging students to consider multiple perspectives, intercultural awareness not only fosters tolerance and respect, but may also lead to empathy.

Communication

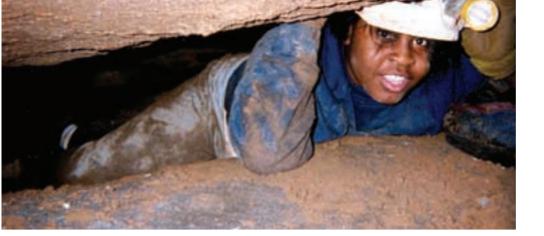
With holistic education and intercultural awareness, the MYP considers *communication* fundamental to learning, as it supports inquiry and understanding, and allows student reflection and expression. Good command of one's own language enables clear expression of ideas, attitudes and feelings. The learning of other languages extends that competence and teaches appreciation of different cultures and ways of thinking. But more than simply generating

Areas of interaction

Five broad areas known as the *areas of interaction* give the MYP curriculum its distinctive core and reflect the programme's focus on students' intellectual and social development. These are not academic subjects like the specific disciplines, but rather are *common* perspectives embedded within and visible across academic subjects. They provide a framework of learning, allowing connections among the subjects themselves.

The five areas of interaction are the following:

- APPROACHES TO LEARNING (How do I learn best? How do I know? How do I communicate my understanding?)
- COMMUNITY AND SERVICE
 (How do we live in relation to each other? How can I contribute to the community? How can I help others?)
- HOMO FABER (Why and how do we create? What are the consequences?)
- ENVIRONMENT (Where do we live? What resources do we have or need? What are my responsibilities?)
- HEALTH AND SOCIAL EDUCATION
 (How do I think and act? How am I changing? How can I look after myself and others?)



These areas are addressed in a consistent and creative fashion over the five-year cycle of the MYP, primarily through the subject groups, but also through interdisciplinary teaching and projects, activities involving the whole school, and personal research.

APPROACHES TO LEARNING is central to the programme, as it is concerned with developing the intellectual discipline, attitudes, strategies and skills which will result in critical, coherent and independent thought and the capacity for problem solving and decision making. It goes beyond study skills, having to do with learning how to learn and with developing an awareness of thought processes and their strategic use.

COMMUNITY SERVICE starts in the classroom and extends beyond it, encouraging responsible, caring participation in the local environment and in the wider world. The emphasis is on developing community awareness and concern, a sense of responsibility, and the skills and attitudes needed to make an effective contribution to society.

HOMO FABER is concerned with the products of the creative and inventive genius of people, and with the

impact of this creativity on society and on the human mind. The student learns to appreciate and experience the human capacity and drive to transform, enjoy and improve the quality of life over time.

ENVIRONMENT aims to make students aware of their interdependence with the environment so that they accept their responsibility for maintaining an environment fit for the future. Students are confronted with global environmental issues that require balanced understanding in the context of sustainable development.

HEALTH AND SOCIAL EDUCATION concentrates on preparation for a physically and mentally healthy life in which the student is aware of potential hazards and is able to make informed choices based on respect for body and mind. This area encourages students to explore their own selves as they develop healthy relationships with others.

The areas of interaction are closely linked to each other and to the eight subject groups, which they touch in different ways.

Personal project

The five areas of interaction are perspectives rather than specific subjects, and are not directly assessed nor awarded individual grades. They are indirectly assessed through the personal project, an independent piece of work that is intended to be the culmination of the student's sustained involvement with the five areas. The personal project allows the student to complete a significant piece of work over an extended period of time, through a process led by the student with supervision by a teacher. The choice of type of project and its topic is made by the student in consultation with one or more of the MYP teachers responsible for supervising the project's

execution according to IBO-published guidelines. The personal project must be accompanied by a document in which the student describes the approach and the method that has been followed and provides a personal response to the issues concerned. The school uses published assessment criteria to assess the personal project.



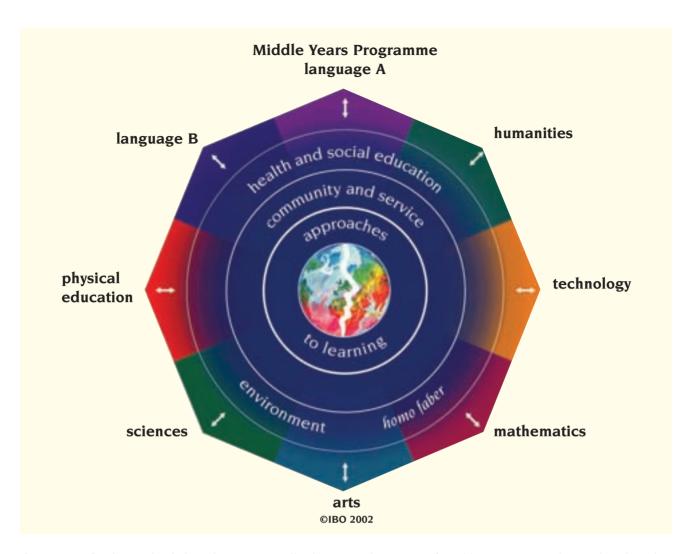
The Curriculum

MODEL



The Middle Years Programme curriculum model is displayed in the shape of an octagon with eight academic areas or subject groups surrounding the areas of interaction. The emphasis is on the fluidity of the system and the interrelatedness of the subjects. Aspects of the areas of interaction are addressed naturally within the distinct disciplines.

The framework is flexible enough to allow a school to include other subjects not determined by the IBO but which may be required by local authorities. Schools may deliver the programme in any language under certain conditions, although IBO services are provided in a limited number of languages. Taken as a whole, the curriculum provides a balanced education that will equip young people for effective participation in the modern world.



Language A: the student's best language, usually the school's language of instruction

Language B: an additional modern language learned at school

Humanities: history and geography

Sciences: biology, chemistry, physics

Mathematics: one course including five branches of mathematics: number, algebra, geometry and trigonometry, probability and statistics, and discrete mathematics

Arts: visual arts and performing arts

Physical education: one course including a wide range of physical activities

Technology: computer and design technology

Language A

Language A is defined as the student's best language. It is typically but not necessarily the language of instruction in the school, and is obviously fundamental to the curriculum as it crosses the boundaries of the traditional disciplines. It is the basic tool of communication in

the sense of enabling one to understand and to be understood, and to establish one's own identity. Language is also the avenue by which one gains access to literature and thereby to the cultural treasury of civilization. The Middle Years Programme thus distinguishes between the instrumental function of language when it emphasizes listening, viewing, speaking, reading and writing skills, and the study of literature, which encompasses a variety of periods and genres.

Language B

Language B, an additional modern language, similarly plays a double role. It is the means by which one communicates with another linguistic community and the gateway to the understanding of another culture. For MYP purposes, the study of a language B should represent a genuine encounter with something new to the student. It fosters communication skills and the appreciation of other cultures, increasing the students' self-knowledge and their knowledge of the world. The teaching and learning of a language B, a modern language in addition to one's own, is a compulsory aspect of the MYP in every year of the programme.



Humanities

Humanities in the MYP consists of both geography and history and is intended to be taught throughout the full sequence of the Middle Years

Programme. The school itself determines whether humanities is taught in distinct units, in an integrated way, or as part of an existing social studies programme. Key concepts contained within the subjects are intended to provide the foundation for further study in many fields. The programme is presented as a conceptual framework within which teachers are free to select and design individual courses that are adapted to available resources, local requirements and the specific needs of students.

The study of geography is intended to lead students from an understanding of the immediate environment to an appreciation of spatial phenomena at regional, national and global levels. Through the use of a body of major geographical concepts relating to orientation, geographical position, spatial representation, development, and environment, the student acquires the ability to analyse, classify, explain and record spatial phenomena with increasing sophistication at each level.

The study of history in the MYP demands a truly international approach. It addresses a variety of cultures and times, and stresses their increasing interaction in our modern world. History within an international curriculum stresses the ability to analyse evidence, to use historical sources in a critical way, to detect bias, and to argue empathetically. Beyond factual knowledge, students are encouraged to develop the capacity to think and write historically and to enjoy and value the past for its own sake as well as a means by which to understand and appreciate the present.



Sciences

The study of science aims to provide the student with both a body of knowledge and an understanding of the scientific approach

to problem solving. This dual role makes science an important means to investigate and understand the natural world. The ability to formulate hypotheses, design and carry out strategies to test them, and evaluate

results, constitutes the framework within which specific content is presented. Among other skills, the student is expected to use basic laboratory equipment safely and efficiently, to measure and make sensible estimates, and to classify things logically.

Within MYP sciences are the traditional subjects of biology, chemistry and physics, as well as topics, concepts and issues from other branches of science, such as earth and health sciences. As with other areas of the curriculum, students are encouraged to relate the content of the classroom and laboratory to the realities of life as they develop critical thinking and problem-solving skills.

As well as providing a sustained, valuable academic experience, the MYP sciences subject group promotes an awareness of the increasingly international context of scientific activity, its impact and limitations, as well as the constant evolution of scientific knowledge and understanding. Students are encouraged to consider science as a constantly evolving cooperative venture between individuals and among members of the international community, influenced by its social, economical, technological, political, ethical and cultural surroundings.



Mathematics

MYP mathematics sets out to give students an appreciation of the usefulness, power and beauty of the subject. One aspect of this is the

awareness that mathematics is a universal language with diverse applications. MYP mathematics promotes an understanding of how cultural, societal and historical influences from a variety of cultures have shaped mathematical thought. Students learn to understand and discuss the international nature of mathematics.

Schools are required to develop schemes of work according to a framework that includes five branches of mathematics: number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics. Aims and objectives include understanding mathematical reasoning and processes, the ability to apply mathematics and to evaluate the significance of the results, the ability to develop flexible strategies for problems in which solutions are not obvious, and the acquisition of mathematical intuition.



Arts

The arts subject group of the curriculum encompasses visual arts and performing arts and is of particular interest in an international

programme. From the earliest times, artistic expression has been common to all cultures as human beings make statements through a variety of non-verbal forms and create objects which are aesthetically pleasing. Beyond the barrier of languages, the discovery of the cultural values of civilizations through their artistic production is one of the best ways to promote international understanding.

The coursework brings students into contact with the art forms and aesthetic values of other cultures as well as their own, and helps to develop perceptions between ideas and art. Students are encouraged to identify particular creative abilities and to master techniques appropriate to that form of expression. In addition to developing the student's own imagination and skills, the programme seeks to acquaint young people with the creations of men and women whose works have proven to be of enduring worth.

MYP arts is designed to help the student become a developing artist, one who is able to assess the level of skill and target the areas that need development. It organizes learning around the creative cycle, a dynamic, ongoing process of sensing, planning, creating and evaluating art, and one in which all the senses are involved. This cycle involves creative energy, communication, interaction and reflection.



Physical education

Physical education has a unique and significant contribution to make, since its aim is to facilitate physical, intellectual, emotional and social

development. The Middle Years Programme intends to cultivate a healthy and active lifestyle for students and consequently advocates activities which are not only enjoyable but also contribute to healthy living. Students are helped to develop the motor skills necessary to enable them to participate successfully in a variety of physical activities, and learn the benefits of a regular exercise regime.

MYP physical education enables students to establish links between different areas of experience. It is also a useful area in which to incorporate intercultural awareness, as physical education is a reflection of elements of history, culture and values. The course requires schools to allow students to experience and appreciate a wide range of physical activities in and outside the school. MYP physical education also provides opportunities for different forms of self-reflection, communication and team work.



Technology

Technology in the MYP aims at establishing the foundations for technological literacy and know-how. Students become aware of the practical solutions people have

devised to satisfy their basic need for food, clothing and shelter as well as to communicate, to preserve their health, to learn, and to enjoy themselves. Technology in the MYP is essentially concerned with solving problems in an effort to stimulate students' ingenuity and to encourage them to combine intellectual talents and practical skills.

While allowing schools great flexibility in the choice of subjects, the teaching of technology in the MYP provides a balance among three key areas: systems, information and materials. All technology courses chosen by schools should allow students to display ingenuity and creativity and to devise practical solutions to given tasks by following the design cycle of investigation, planning, creation and evaluation. This subject area offers great potential for reinforcing and integrating skills learned in other disciplines, especially in the presentation and handling of data and the processes involved in the design and manufacture of a product. At the same time, it fosters awareness of the social and ethical implications of technological development.

Options

The Middle Years Programme allows schools the flexibility of addressing their own syllabus requirements. For example, optional subjects such as



economics or Latin may be offered if they are mandated by local authorities or determined by the school to be important to its curriculum. These subjects do not form part of IBO-validated assessment.

Programme Evaluation & Services

RELATED TO STUDENT ASSESSMENT

The IBO offers to its participating Middle Years

Programme schools a programme evaluation

service and a monitoring of assessment service.

It may also validate a school's internal student

assessment through a process of external

moderation.



Programme evaluation

Regular programme evaluation is designed to assess the effectiveness of the delivery of the MYP within a school. Following a thorough process of self-study by the school, IBO-appointed personnel carry out the evaluation on-site; evaluators are IBO personnel, Middle Years practitioners themselves, or knowledgeable professionals familiar with the programme. The evaluation process does not assess individual teachers or students, nor does it alter the subject-by-subject assessment carried out by teachers.

The main purpose of programme evaluation is to identify where adjustments should be made to the organization, administration, and implementation of the programme. The strengths and weaknesses of the programme, as delivered in the school, are identified in a report sent to the school by the IBO. The information provided assists schools in developing an action plan in response to specific recommendations regarding such issues as effective allocation of time, use of resources and the development of curriculum.

The process of programme evaluation is a crucial part of curriculum delivery. Schools can request additional consultation visits at any time.





Moderation of internal assessment

Student assessment within the Middle Years Programme consists of two types, each with a specific function. Formative assessment is used to judge periodically the progress and effect of studies and see to what extent the objectives have been achieved. Thus informed, teachers are able to make any adjustments necessary to their teaching methods and students can judge



their progress, noting any gaps which remain. The purpose of formative assessment is to measure and assist the progress of the individual student.

Summative assessment takes place at the end of the programme and provides a summary of the objectives achieved. The purpose of summative assessment is to show the final achievement of the individual student in relation to the specific objectives. The summary reveals to what degree the student has mastered the stated objectives for a particular aspect of the Middle Years Programme.

All MYP assessment, whether formative or summative, is carried out by MYP teachers in participating schools using assessment criteria established by the IBO. Criteria are based on the published objectives of the groups and subjects. There are no formal externally set or externally marked examinations. The International Baccalaureate Organization instead validates the standards of the authorized school's assessment through a process of external moderation.

This procedure is required for all schools wishing the IBO to issue certificates to their graduating students. MYP certificates will not be issued to schools whose standards are not validated annually.

Subject assessment usually employs a variety of assessment tools, such as formal and informal oral work; written work such as objective tests, structured short answers, untimed tests, open-book tests, stimulus/data response, essays, coursework and projects; and practical work such as knowledge and use of an apparatus, identifying and solving problems, construction of a hypothesis, testing, evaluation and analysis. The choice of assessment tool will vary depending on resources available to the school, the part of the programme to which it is applied, and the objectives it aims to measure.





The student's accomplishments, measured during the school's assessment process, are recorded by the school in the *portfolio* of achievement provided by the IBO for each graduating student of the MYP. The aim of the portfolio is to record the student's profile and achievements in various aspects of life at school. It includes documents produced and validated by the IBO as well as certificates or documents issued by the school, reflecting the

character and content of the local programme. The portfolio may contain academic results as well as information relating to community service, the personal project and any extracurricular achievement. The student's experience of and achievement in subjects not part of the MYP (options) may be recorded in the portfolio. The portfolio also contains a self-evaluation by the student.

The award of a record of achievement and a certificate – formal documents certifying the student's performance in the Middle Years Programme – is limited to those schools electing to have the internal assessment of their students validated by the IBO through external moderation. The record of achievement lists results in all moderated subjects in which the student has been awarded a grade by the school. The certificate is issued only to students who complete stated requirements.

Monitoring of assessment

Monitoring of assessment is an optional service for authorized schools. It is aimed at providing support and guidance in the implementation and development of the programme with regards to internal assessment procedures and practices in a school. It uses the expertise of trained moderators and experienced MYP subject specialists.

The monitoring of assessment service is an advisory service developed to help schools apply MYP assessment principles to their own local circumstances. It is not linked to the validation of school grades or certification of students. It may, however, be used as a preliminary step in preparation for a first submission to external moderation. It also forms part of the programme evaluation procedures for schools that do not submit to external moderation.

Implementing the programme

The Middle Years Programme is designed for students aged II and I6. Programme levels range from year I (commencement of the programme) to year 5 (final year). The organization of this cycle may vary slightly to accommodate constraints within the school. Four-year programmes may be authorized by the IBO provided that there is evidence that the final objectives in each subject group can be reached successfully at the end of the four years.

The Middle Years Programme is not a static system. It is essentially evolutionary, requiring

adjustment and development in the light of experience. This approach nourishes educational thought and guides the development of a flexible curriculum so that schools can adapt the programme to their various environments and socio-cultural backgrounds.

It is important to obtain and analyse all available information from the International Baccalaureate Organization before introducing the Middle Years Programme in a school. All school staff members should be involved in the initial planning stages. Following consultation and evaluation of the information, the school may wish to apply formally for authorization to offer the Middle Years Programme. The application process involves a period of implementation of the programme and teacher training. Schools should contact the appropriate IBO regional office to secure materials and obtain guidance.

Strategic planning

The decision to adopt the Middle Years Programme is likely to affect the organization of the entire school. Strategic planning is necessary to establish the objectives of the programme in the context of the school and its local conditions; set up a time framework for the implementation of the Middle Years Programme; assign funds for the allocation of the necessary resources; and to present the new programme to the school community with clarity and conviction.







Application of resources

Careful thought should be given to the time needed for teams of teachers to plan their work together at each level and throughout the five-year cycle; for group projects across and within levels and at more than one level for related activities, particularly in the areas of interaction; and for the construction of a timetable that will enable teachers to meet the objectives of each aspect of the programme.

The Middle Years Programme depends on knowledgeable, dynamic and innovative teaching which in turn requires motivation and institutional support. All participating teachers need to engage in a continuous process of staff development, including in-service training activities and attendance at regional workshops sponsored or endorsed by the International Baccalaureate Organization.

Before receiving authorization to embark on the programme, the school must ensure that there is adequate provision of materials such as books, equipment, supplies and other resources for each subject and in support of each area of interaction.

Internal evaluation

The school should design a systematic internal evaluation scheme to identify to what extent the objectives of the Middle Years Programme are being achieved, what factors are impeding progress, what modifications may be needed, and how future resources will be secured. The school's self-evaluation procedures should be available for the MYP evaluation visits organized by the IBO regional office at regular intervals.

Coordination

The Middle Years Programme requires coordination within the school, between the school and the community, and between the school and the International



Baccalaureate Organization. Each school must appoint a coordinator to ensure effective implementation of the Middle Years Programme, particularly with respect to the areas of interaction. Typically, an educational team will be set up in the school and may consist of the MYP coordinator, specifically designated leaders for the various areas of interaction or year groups, a community service coordinator, subject teachers who may represent groups or academic departments, and one or more members of the guidance counselling staff.

The goal is to ensure that the faculty members function as a cohesive, informed team enabling students to derive maximum benefit from a fully integrated and well-managed programme.







The timetable

The IBO does not specify timetables since each school has different constraints and requirements, such as congruence with a national system. Examples of MYP schools' timetables are included in the *Implementation and Development of the Programme* guide published by the IBO.

In order to preserve the principle of a well-rounded, balanced educational experience for all age groups, the MYP requires schools to schedule structured learning in each of the subject areas for each year of the programme. Scheduling of class time can vary from year to year and subject to subject, according to the nature of the learning and the needs of the students. In keeping with the

philosophy of the MYP, the objectives of individual subjects can often be reached through interdisciplinary or integrated teaching. While such approaches emphasize the relationships between subjects and the links to the areas of interaction, care must be taken to keep both teachers and students aware of all the dimensions of the courses. Moreover, subjects which are additional to those listed as MYP subjects should be incorporated as the school timetable permits. Examples of programmes currently in operation are available from IBO offices.



