

SCHOOLS' GUIDE TO

# THE DIPLOMA PROGRAMME



## 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 110 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.

Produced by corporate relations

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[www.ibo.org](http://www.ibo.org)

IMPORTANT NOTE: This printed version of the schools' guide to the programme is revised and reprinted every two years. It is a companion document to the online version at [www.ibo.org](http://www.ibo.org) which is kept current.

THE ONLINE VERSION IS THE OFFICIAL ONE and please refer to it for changes.

Designed by Diana Catherines

# The Diploma

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## P R O G R A M M E



*The International Baccalaureate Organization's Diploma Programme (DP), created in 1968, is a demanding pre-university course of study that leads to examinations; it is designed for highly motivated students aged 16 to 19. The programme has earned a reputation for rigorous assessment, giving IB diploma holders access to the world's leading universities. The IBO has shown, over the course of 30 years, that IB Diploma Programme students are well prepared for university work.*

*The Diploma Programme's grading system is criterion based: each student's performance is measured against well-defined levels of achievement consistent from one examination session to the next. Grades reflect attainment of knowledge and skills relative to set standards that are applied equally to all schools. Top grades are not, for example, awarded to a certain percentage of students.*



*The programme is a comprehensive two-year international curriculum, available in English, French and Spanish, that generally allows students to fulfill the requirements of their national or state education systems. The Diploma Programme incorporates the best elements of national systems, without being based on any one. Internationally mobile students are able to transfer from one IB school to another, while students who remain closer to home benefit from a highly respected international curriculum.*

*The programme was born of efforts to establish a common curriculum and valid university entry credentials for students moving from one country to another. International educators were motivated by practical considerations but also by an idealistic vision: students should share an academic*

*experience that would emphasize critical thinking, intercultural understanding and exposure to a variety of points of view.*

*Today, nearly half the students opting for the Diploma Programme come from state or national systems rather than from international schools. The idealism has remained unchanged, however. The IBO's goal is to provide students with the values and opportunities that will enable them to develop sound judgment, make wise choices, and respect others in the global community. The programme equips students with the skills and attitudes necessary for success in higher education and employment.*

*The programme has the strengths of a traditional liberal arts curriculum, but with three important additional features, shown at the centre of the hexagonal curriculum model. (see page 9)*

# Requirements

## Theory of Knowledge

Theory of Knowledge (TOK), an interdisciplinary requirement intended to stimulate critical reflection on knowledge and experience gained inside and outside the classroom, is a course of study unique to the International Baccalaureate Organization and mandatory for every Diploma Programme student; it adds coherence to the programme. TOK should involve at least 100 hours of teaching time spanning the programme's two years.

The origins of TOK lie in a fusion of two divergent educational traditions, one pragmatic and the other placing prime importance on the teaching of philosophy. In TOK, students are encouraged to reflect on all aspects of their Diploma Programme work. It is possible to have informed discussions about the nature and purposes, strengths and limitations of particular knowledge systems, since distribution requirements ensure that course selections include each of the principal domains of knowledge.

For example, students are encouraged to reflect on the nature of poetic truth in literature and to contrast such truth with that obtained in other systems of knowledge – the historical fact, the scientific fact, a mathematical proof, and so on. They also examine the grounds for the moral, political and aesthetic judgments that individuals must make in their daily lives. Emphasis is placed on the role of language and thought and on the development of the student's critical thinking skills.

Students are helped to consider how they know what they know (different ways of “knowing”) and to develop habits of reflection which they bring to each subject, resulting in a deeper intellectual experience. As befits an international programme, the TOK course explores various cultural traditions and encourages students to think about the



strengths and limitations of different ways of knowing.

TOK is not another name for philosophy, which exists as a subject option in its own right, yet in a broad sense the aim of TOK is to encourage a philosophical cast of mind and to promote clarity of thought and good judgment.

The IBO devotes considerable energy to training teachers and to providing exemplar (sample) materials.

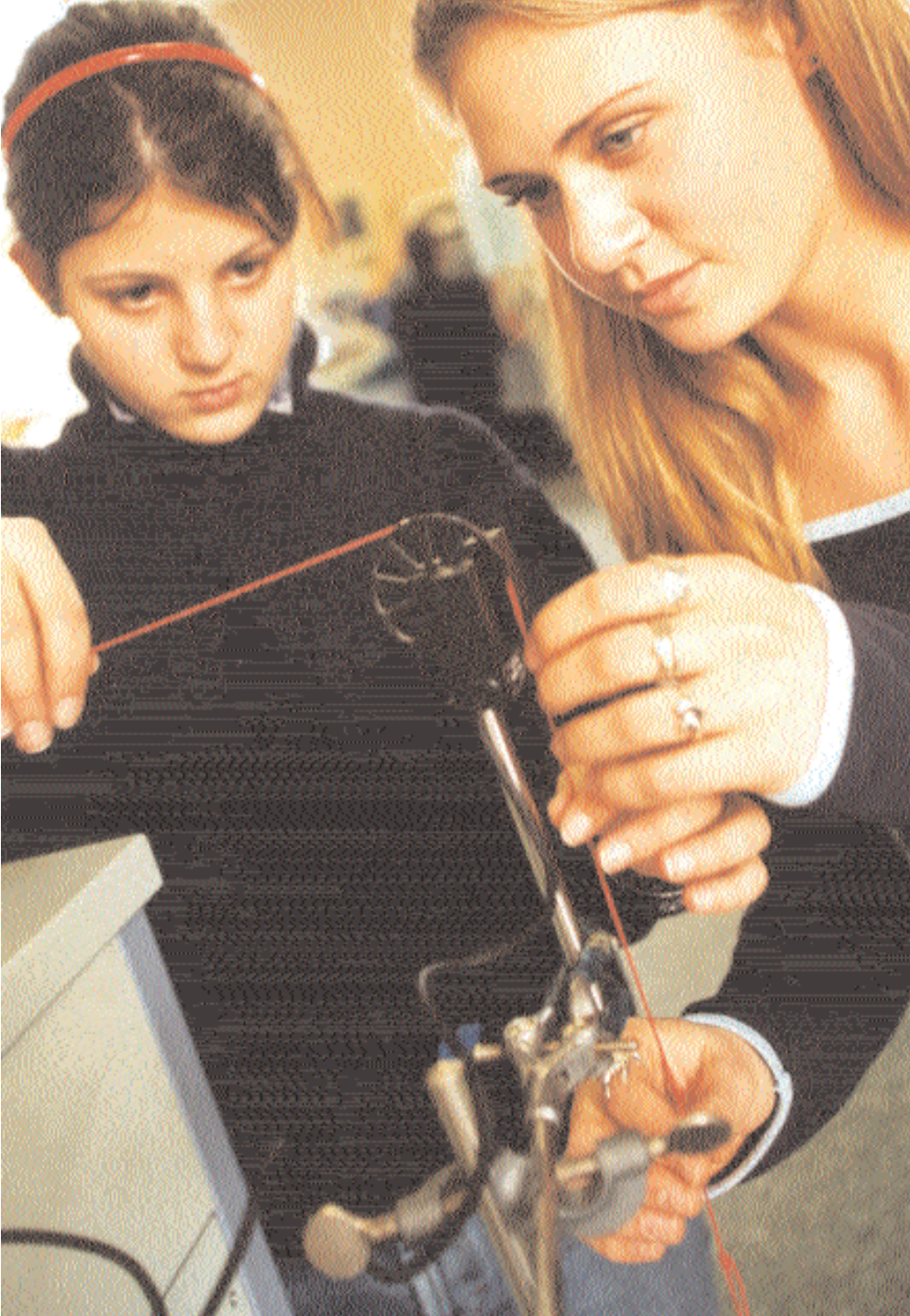
### Assessment of performance in TOK

Each student is required to submit one essay between 1,200 and 1,600 words, from a list of 10 titles prescribed by the IBO for each examination session. In addition, the student makes a 10-minute presentation to the class and writes a self-evaluation report that includes a concise description of the presentation and answers to questions provided by the IBO.

## The Extended Essay

IB Diploma Programme students are required to undertake original research and write an extended essay of 4,000 words (maximum). This essay offers the student the opportunity to investigate a topic of special interest and to become acquainted with the kind of independent research and writing skills expected at the university level. The IBO recommends that a student devote a total of about 40 hours of private study and writing time to the essay.

A student may choose to write on a topic in one of 22 subjects, plus some 50 language/literature courses. The extended essay can serve to deepen a student's programme of study, for example when the student chooses to focus the essay on a topic included in a higher-level course. Students may also elect to add to the breadth of their academic experience by writing on a subject not included in their diploma choices.



### **Other requirements and restrictions\***

Native and non-native speakers alike are entitled to submit extended essays in language or literature, but they must write the essays in the language for which they are registered. For example, a native English speaker registering an extended essay in Spanish language and culture must write the paper in Spanish. When a school registers candidates for an examination session it must indicate, for each student, which of the three IBO examination languages will be used.

### **Supervision**

Schools must appropriately supervise IB diploma candidates as they write their extended essays. The supervisor is usually a faculty member able to provide academic guidance concerning the subject in which the extended essay is registered. In addition, the supervisor provides general guidance on time management and the overall structure and presentation of the paper, and ensures that the essay is the candidate's own work.

### **Subject matter of the extended essay**

An extended essay in a subject from groups 1 or 2 may focus on language or literature. A focus on language enables the student to develop knowledge of the structure and form of the language studied in order to better understand the culture in which it is spoken. The essay might explore an issue related to a particular society, using examination of the language to show how users of this language think and behave. A focus on literature allows candidates to develop personal criticism of a literary text or to study a literary topic in depth. Some students elect to do comparative studies of works written in their native language and in another language.

### **Assessment**

Extended essays are assessed according to both general and subject-specific criteria. The general criteria relate to the appropriateness of the research question, the way in which the material is handled, the level of analysis and the quality of the argument. Subject-specific assessment criteria relate to how candidates manage their chosen topic within the context of the subject in which the essay is registered. Since the purpose of the extended essay is to provide students with an opportunity to engage in independent research, the general assessment criteria are given twice as much weight as the subject-specific criteria.

\* Creative writing is not permissible in extended essays. Extended essays submitted in the other academic areas of the curriculum must be registered in one of the official subjects of the Diploma Programme or a school-based syllabus that has been approved by the IBO. Interdisciplinary themes are not accepted for the extended essay.



## Creativity, Action, Service (CAS)

CAS is a fundamental part of the Diploma Programme experience. The CAS requirement takes seriously the importance of life outside the world of scholarship, providing a refreshing counterbalance to the academic self-absorption some may feel within a demanding school environment. The IB goal of educating the whole person and fostering a more compassionate and active citizenry comes alive in an immediate way when students reach beyond themselves and their books.

The CAS requirement encourages students to share their energy and special talents with others: students may, for example, participate in theatre or musical productions, and sports and community service activities. Students should, through these activities, develop greater awareness of themselves and concern for others, as well as the ability to work cooperatively with other people.

**Creativity** is interpreted broadly to include a wide range of arts activities as well as the creativity students demonstrate in designing and implementing service projects.

**Action** can include not only participation in individual and team sports but also taking part in expeditions and in local or international projects.

**Service** encompasses a host of community and social service activities. Some examples include helping children with special needs, visiting hospitals and working with refugees or homeless people. Each school appoints a CAS supervisor who is responsible for providing a varied choice of activities for all Diploma Programme students. Programmes are



monitored by IBO regional offices. Students are expected to be involved in CAS activities for the equivalent of at least three to four hours each week during the two years of the programme.

A system of self-evaluation encourages students to reflect on the benefits of CAS participation to themselves and to others, and to evaluate the understanding and insights acquired.

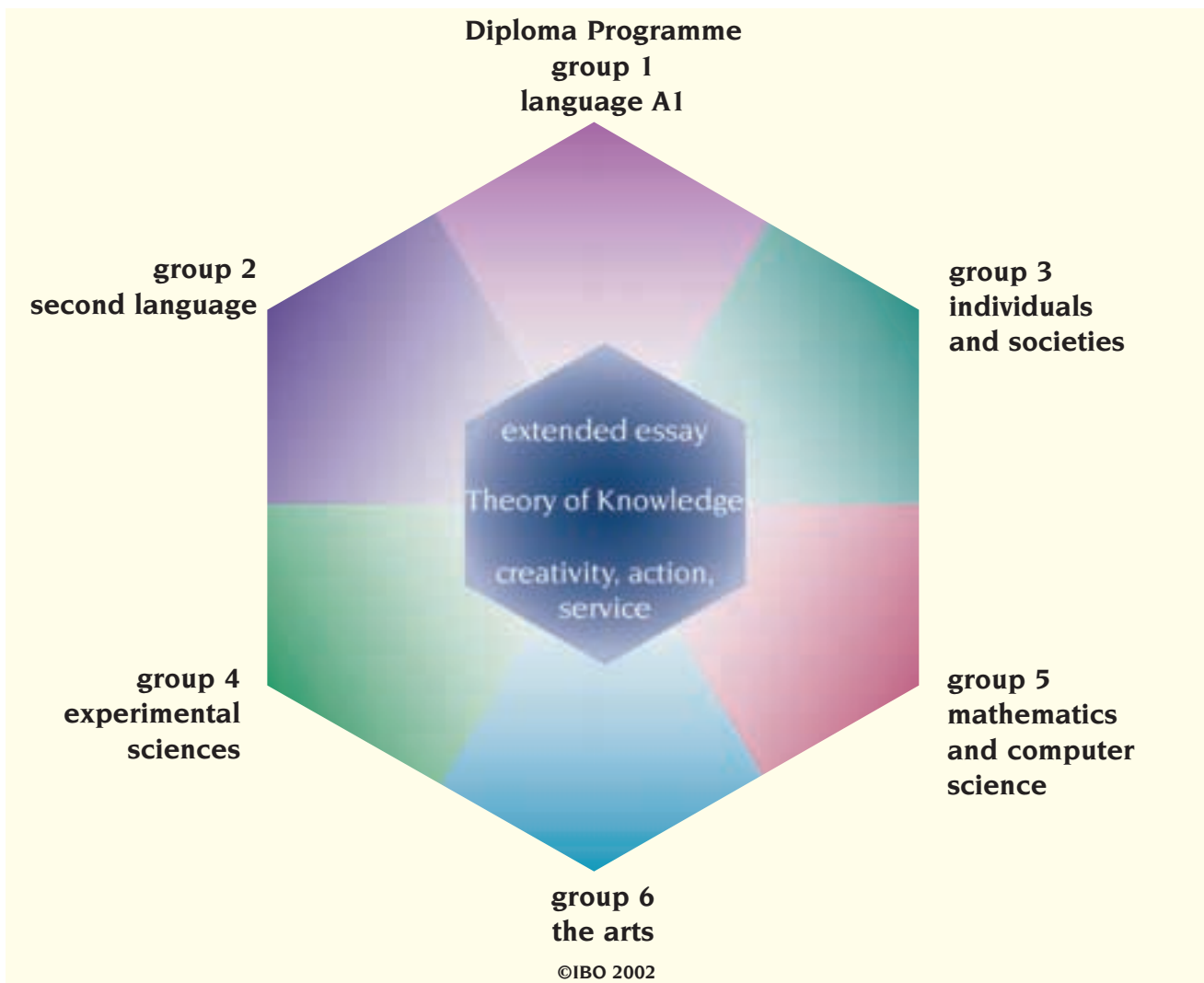
# The Curriculum

## M O D E L



*The IBO's international curriculum planners seek to ensure that the organization's educational aims are embodied in the structure and content of the programme itself. The Diploma Programme is displayed in the shape of a hexagon with six academic areas or subject groups surrounding a core of requirements; students study the subjects concurrently. Students are exposed to the two great traditions of learning: the humanities and the sciences.*





## Courses at the higher level and standard level

Programme students are required to select one subject from each of the six subject groups which correspond to the principal domains of knowledge. At least three and not more than four are taken at higher level (HL), the others at standard level (SL). HL courses represent a recommended 240 teaching hours, SL courses 150 hours. By arranging work in this fashion, students are able to achieve depth of study in the context of a broad and coherent curriculum over the two-year period.

## Breadth and specialization

The IB pattern is a deliberate compromise between the early specialization preferred in some national systems and the greater breadth found in others. Active citizenship and global perspectives are encouraged in each area of the curriculum.

Distribution requirements ensure that the science-oriented student is challenged to learn a second modern language and that the natural linguist becomes familiar with science laboratory procedures. Flexibility in



choosing higher-level concentrations allows the student to pursue areas of personal interest and to meet special requirements for university entrance within a balanced overall programme.

The subjects are continually reviewed and revised to meet contemporary needs. The list that follows serves as a current guide only.

Students have several language options: all must take a first language course (group 1) as well as a second language (group 2). There are three levels for the second languages: bilingual or highly competent, foreign language, no experience with the language.



### Group 1: language A1

More than 80 different first languages have been offered for examination as part of the IBO's policy of encouraging students to maintain strong ties to their own

cultures. Students ideally develop strong written and oral skills, respect for the literary heritage of their first languages, and an international perspective.

Every diploma candidate is required to include a group 1 language, either HL or SL. Where no teacher is available, a student may be allowed to study language A1 as a self-taught candidate at SL only.

The range of texts studied in language A1 courses is broad: students grow to appreciate a language's complexity, wealth and subtleties in a variety of contexts. Confidence and competence in oral and written communication skills are fostered. One of the explicit aims of the language A1 group is to engender a lifelong interest in literature and a love for the elegance and richness of human expression.

### Group 2: second language

Second-language courses develop students' powers of expression, provide them with a resource for the study of other subjects, and bring them into contact with ways of thought which may differ from their own.



Several options in group 2 accommodate bilingual students with a very high level of fluency, second-language learners with previous experience learning the language, and beginners. The principal aim for the courses in group 2 is to enable students to use the language in a range of contexts and for many purposes; the courses focus on written and spoken communication. Latin and classical Greek are also available in group 2. All diploma candidates take an examination in a second language.

Students can also do two languages A1, omitting group 2.

### Group 3: individuals and societies

Subjects included in this group span the humanities and social sciences, and are the following: business and management; economics; geography; history; Islamic history; information technology in a global society (at SL only), philosophy; psychology; social and cultural anthropology.

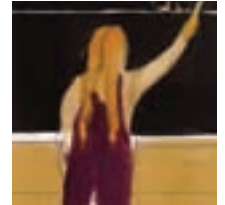
An essential characteristic of the disciplines in group 3 is that their subject matter is contestable and that their study requires students to tolerate some uncertainty.

Studies of local situations and of global perspectives foster an appreciation of change and continuity as well as of similarity and difference. Students evaluate the major theories, concepts and research findings of the respective disciplines and learn each discipline's methodology.

Examination papers are available in English, French and Spanish.

### Group 4: experimental sciences

The subjects available in group 4 are the following: biology, chemistry, physics, environmental systems (at SL only), design technology.



Experimental science subjects promote an understanding of the concepts, principles and applications of the respective disciplines, together with an appreciation of the methodology of the experimental sciences in general. Students develop practical laboratory skills as well as the ability to work collaboratively through participating in an interdisciplinary group project.

A common curriculum model applies to all subjects in group 4. This model offers a parallel structure at both higher and standard levels whereby all candidates study a core of material which is supplemented by various options. Examination of local and international examples helps students develop an awareness of moral and ethical issues and promotes social responsibility.

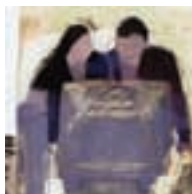
### Group 5: mathematics and computer science

All candidates for a diploma are required to complete a mathematics course, and four options are available to cater for different abilities and levels of student interest. Each course aims to deepen a student's understanding of mathematics as a discipline and to promote confidence and facility in the use of mathematical language. Computer science is an elective subject in group 5; it is not compulsory.

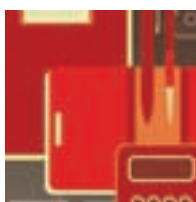
**Mathematics HL** is designed for students with competence and a strong background in mathematics. Some students will choose to study the subject because they have a genuine interest in mathematics and enjoy meeting its challenges and problems. Others elect the higher-level course to prepare for additional mathematics studies at university or because they need mathematics for related subjects such as physics, engineering and technology.

**Further mathematics SL** is designed for students who intend to specialize in mathematics at the university level. This course requires a high degree of competence and interest in the subject. It is usually taken in addition to mathematics HL.

**Mathematical methods SL** is designed to provide a background of mathematical thought and a reasonable level of technical ability for those not wishing to take mathematics at the higher level. It is intended to provide a sound mathematical basis for those students planning to pursue further studies in



fields such as chemistry, economics, geography and business administration. It is a demanding course containing a variety of mathematical topics.



**Mathematical studies SL** is designed to provide a realistic option for students with varied backgrounds and abilities who are not likely to require mathematics beyond the Diploma Programme. Students develop the skills needed to cope with the mathematical demands of a technological society; they also apply mathematics to real-life situations. A substantial piece of personal research, in the form of a project, is a requirement of the course.

### Group 6: the arts

This includes visual arts, music and theatre arts, with emphasis placed on practical production by the student and exploration of a range of creative work in a global context.



**Options:** Instead of a group 6 subject, a candidate may select an additional subject from groups 1 to 4, or further mathematics SL, or further mathematics and computer science from group 5. Examination papers for subjects in groups 3 to 6 are available in English, French and Spanish.

## School-based syllabus (SBS)



In consultation with the IBO curriculum and assessment centre, schools may design a standard-level SBS that can be substituted for a subject in groups 2, 3, 4 and 6. SBSs have historically been a rich source of curriculum innovation. Many of these enabled schools to meet national educational requirements without imposing an additional workload on Diploma Programme students.

This special option, available at the standard level only, is an internally assessed and externally moderated course of study designed by the school according to its own needs and teaching resources. Such courses, which require approval by the IBO and are subject to periodic review, may be proposed only by schools that have entered candidates for previous examinations.

SBSs may be authorized as an alternative to a subject in groups 3 to 5, provided that the relevant group criteria, found in published guides, are satisfied. Some examples of approved SBSs include world religions, peace and conflict studies, Chile and the Pacific Basin, and Asian arts.

## Special requirements and restrictions

Students must choose one subject from each of groups 1 to 5, thus ensuring breadth of experience in all areas: languages, the experimental sciences, mathematics and the humanities. The sixth subject may be an arts subject chosen from group 6 or the student may choose another subject from any of the other groups – further mathematics can be chosen as a second subject in group 5 and then only if mathematics HL has already been selected; computer science can only be taken as a second subject in group 5 which means that the students must take a mathematics subject. At least three (and not more than four) subjects must be studied at higher level. The remaining subjects are studied at standard level.

None of the following may be counted towards the diploma: the same subject at HL and SL; the same language for groups 1 and 2; environmental systems and biology (students must choose one or the other); two mathematics subjects (except for mathematics HL and further mathematics SL, which is allowed); more than one school-based syllabus.

# Assessing

## S T U D E N T W O R K



Classroom teachers and IB examiners work in partnership to ensure that students have ample opportunity to demonstrate what they have learned. Responsibility for all academic judgments about the quality of candidates' work rests with examiners worldwide, led by chief examiners with international authority in their fields. Examinations are offered in May for northern hemisphere schools and in November for the southern hemisphere.



The IBO assesses more than 45,000 DP students annually. Each year, approximately 80% of candidates who attempt the diploma are awarded it.

An essential element of IB assessment is that standards are the same worldwide. Authorized schools are located throughout the world and examiners represent many cultural and academic traditions, yet the organization measures candidate

performance according to established standards and criteria that are consistent from place to place and year to year.

Examiners are trained to assess work from an agreed perspective using common IBO "markschemes".

Moderation – a sample of every examiner's marked papers are remarked – is key to achieving the required degree of consistency among examiners of the same subject.

A variety of assessment methods is used to acknowledge both the content and the process of academic achievement and to take into account different learning styles and cultural patterns.



## Written examinations

Written examinations are typically given at the end of the course. A written examination might consist of two papers, taken separately and sometimes even on different days. Ninety minutes might be allotted for completing paper 1, with up to three hours allocated for paper 2. Examinations may include oral and written, long and short responses, data-based questions, essays, and multiple-choice questions.

## Other forms of assessment

Specialized forms of assessment appropriate to the nature of a given subject are also used. Visual arts students, for example, submit a “Candidate Record Booklet” containing photographs of their work and a written statement reflecting on the development of their talents and technical skills, but the basis of their examination is an exhibition of their work. Candidates following IB music courses submit recordings of their performances. Similarly, students of a foreign language are tested for fluency, command of vocabulary, grammar and structure.



## Internal assessment

Methods used by examiners external to the local school are complemented by internal assessment of coursework by the teachers responsible for evaluating students over the entire period of instruction. This is an important aspect of the IBO’s overall assessment strategy, because it recognizes the professional role of the teacher and gives students a chance to show what they can do over time, not just in the pressured context of a final examination.

Internally assessed work usually counts for a minimum of 20% of the final grade in a subject. Because teachers’ grading patterns vary from school to school and country to country, the IBO evaluates teachers’ marks and may adjust them so that international parity is maintained. This process is called *external moderation of internal assessment*.



Internal assessment typically includes teacher evaluation of work done in class, homework assignments, special projects, and notebooks. In some subjects, such as the experimental sciences, students are asked to work cooperatively in group projects to develop a sense of teamwork and shared responsibility for managing the research process and writing up the results.



## Criterion-based grading system

The grading system used by the International Baccalaureate Organization is criterion based. *Validity, reliability* and *fairness* are the watchwords of the IBO's international assessment strategy.

Senior examiners convene after each session to oversee assessment in their subjects and to award grades. When all of the data has been assembled, the IBO takes a second look at the performance of students reported to have suffered some form of adverse circumstances, such as an illness, a death in the family or other factors, such as civil unrest during the exam period. Case histories are prepared and evaluated to see if any degree of compensation should be applied to make sure that candidates' results are fair. This compassionate review ensures that students are not unfairly disadvantaged by situations beyond their control.

With classroom teachers, international examiners and the IBO's professional staff working in partnership, the emphasis is on ensuring that students have ample opportunity to demonstrate what they know and are able to communicate. The system is

complex and involves a great deal of work by all parties, but it is one that results in fair treatment of students whose futures, after all, depend on the assessment of their academic work.

## The grading system

Each examined subject is graded on a scale of 1 (minimum) to 7 (maximum). In order to be awarded the diploma, a student must meet defined standards and conditions, including a minimum total of 24 points and the satisfactory completion of the three diploma requirements: TOK, the extended essay, and CAS activities.

The minimum score of 24 is based on the notion that a grade 4 represents a passing level in each of the six subjects. Specific rules apply to overall performance and are listed in the regulations that schools agree to observe, and which are available as a separate document. Excellent performance in all of the six subject areas results in a total of 42 points (7 points for each subject).

The maximum diploma point score is 45. TOK and the extended essay contribute to the overall score through a matrix system which awards up to three points based on the candidate's combined



performance. The quality of work in both TOK and the essay is measured against assessment criteria, and the results are described according to the following five categories: *elementary*, *mediocre*, *satisfactory*, *good* and *excellent*. The published matrix explaining the various point combinations is available from IBO offices.

Candidates for the diploma normally take all examinations in a single session at the end of the two-year period of preparation, but some choose to take one or two examinations at the end of their first year. Candidates who take their examinations over two sessions are classified as anticipated candidates for the first session. They may take examinations in not more than two subjects, on condition that these subjects are offered at standard level (SL) only and that the recommended number of teaching hours has been completed. Examinations in group 2 *ab initio* beginner level languages are available only in the candidate's final year of the programme.

All students are encouraged to follow the full Diploma Programme. Those who fail to satisfy the entire set of requirements or who elect to take fewer than six subjects are awarded a certificate for examinations completed.



# Authorization

## A N D E L I G I B I L I T Y



*The Diploma  
Programme is  
currently offered  
by more than  
1,000 schools in  
108 countries  
worldwide*

Only centres authorized by the International Baccalaureate Organization are eligible to teach the curriculum and to register candidates for examination. IB diploma candidates must be students in good standing at an authorized school.

### Schools interested in the programme

conduct a self-study and receive counselling through the appropriate regional office. The formal application process includes an on-site inspection visit and the submission of written documentation to IBO headquarters in Geneva, Switzerland. Schools must subscribe to certain criteria and conditions for authorization. Only schools authorized by the IBO are entitled to use the organization's name, the IB world school logo and Diploma Programme designations.

### Partnership

The programme is characterized by a partnership between participating schools and IB staff. Schools participate fully in the development of the programme through an ongoing series of curriculum development meetings, regional conferences and workshops. A greater depth of understanding and appreciation of the complexities of the assessment process is achieved by the presence of teacher observers at the subject grade award meetings and at the final award committee.

This printed guide is a companion to the schools' guide that appears on [www.ibo.org](http://www.ibo.org), the IBO's public Web site. The online version is revised more frequently than the printed one and should be considered the valid document. Changes since the last printed version appeared will be posted on [www.ibo.org](http://www.ibo.org) as an easy reference for schools.

The IBO does not recommend that schools download and print the online version pages because of the Internet time and large amount of ink required.

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