

International Baccalaureate Diploma Programme

A guide to curriculum development

The IB Diploma Programme (DP) is a rigorous, academically challenging and balanced programme of education designed to prepare students aged 16 to 19 for success at university and life beyond. The DP aims to encourage students to be knowledgeable, inquiring, caring and compassionate, and to develop intercultural understanding, open-mindedness and the attitudes necessary to respect and evaluate a range of viewpoints.

The aim of the DP, like all IB programmes, is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. The DP provides opportunities to develop both disciplinary and interdisciplinary understanding that meet rigorous standards set by institutions of higher learning around the world.

To ensure both breadth and depth of knowledge and understanding, students must choose at least one subject from five groups: 1) their best language, 2) additional language(s), 3) social sciences, 4) experimental sciences, and 5) mathematics, and either an arts subject from group 6, or a second subject from groups 1 to 5. In addition, three core elements—the extended essay, theory of knowledge and creativity, action, service—are compulsory and central to the philosophy of the programme.



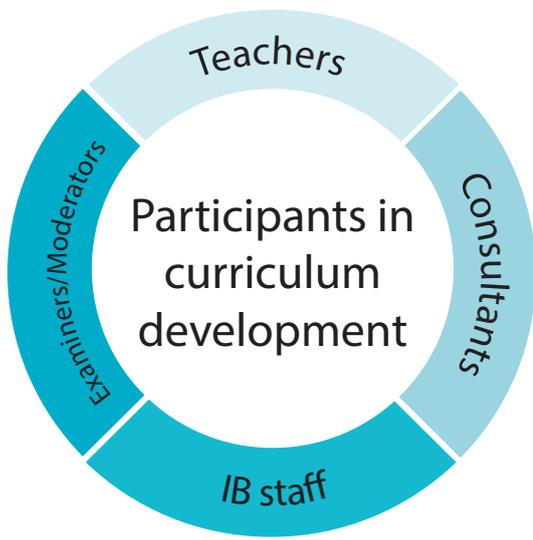
The vision of the IB academic division is to enhance the educational experiences of a diverse and inclusive community of students, through developing distinctive, high-quality programmes of international education that will meet the needs of, and influence, an increasingly connected, global society.

The curriculum review and development process

The aim of curriculum development is:

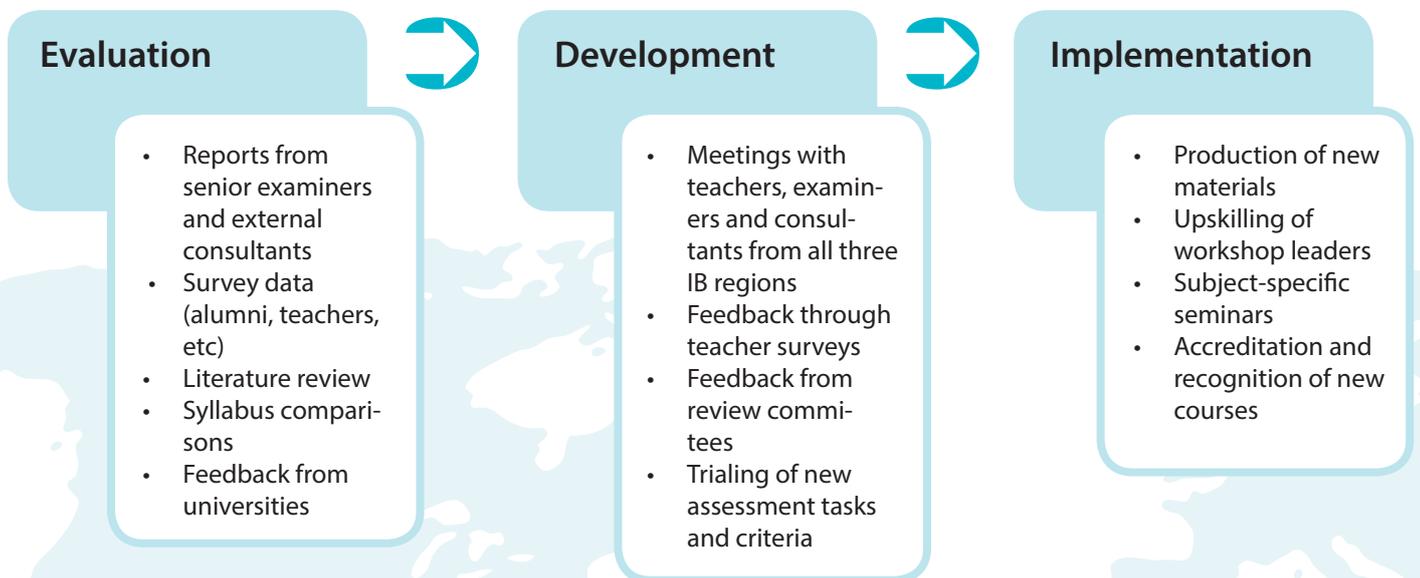
to produce excellent, internationally minded, research-based curriculums and support material that enable students to develop the attributes of the learner profile and the IB mission, thereby providing an excellent preparation for life in the 21st century.

All DP curriculums are reviewed on a seven-year teaching cycle to ensure that each is fit for purpose in a changing world and incorporates the latest educational research and lessons learned from a thorough evaluation of the existing curriculum. Courses are either reviewed individually or together with other subjects in their group. DP curriculum review and development is an in-depth and inclusive process, drawing on the information and expertise from a wide range of resources.



- The education committee of the IB Board of Governors manages overall academic policy across all IB programmes
- The Diploma Review Committee supports the development of the DP by providing guidance on reviewed and new syllabuses at appropriate points in the review process
- A published review cycle and timetable ensure that the curriculum is relevant and up to date without the need for unexpected change
- IB schools worldwide are encouraged to contribute by completing surveys and questionnaires, testing new materials, supplying experienced teachers to attend curriculum review meetings, and commenting on draft subject guides
- The IB produces teacher support material such as sample exam papers and samples of assessed student work

The process for review is spread across three phases.



The **evaluation** phase is concerned primarily with research and gathering representative and comprehensive feedback from IB teachers, students and universities about the course, and incorporates the culmination of a thorough review of subject-specific and broader pedagogical literature. After the first examinations, IB Assessment analyses the effectiveness of the assessment instruments. Evaluation reports are reviewed by various committees, aims and objectives are defined, and content and assessment **development** begins. Teacher feedback is solicited to inform the development plan. Teams are established to work on various aspects of curriculum development and assessment. The focus shifts from research to course development and design of new assessments. New assessment instruments are then trialed. Final guides and teacher support material are published in the seventh year of the cycle, and **implementation** of the new curriculum begins.

Teaching year	Core activities
Year 1: Implementation and evaluation (First year of teaching a new course)	The first year of teaching of a new course marks the beginning of the research phase of the next review cycle. This begins with an evaluation of previous review and setting up the next review. Feedback on the newly implemented course from workshops and universities is taken into account. Setting up collaborative relationships with universities and IB educators, as well as identification of academic and subject specific literature, also begins.
Year 2: Evaluation (First exams of new course)	Research and evaluation of the first assessment of the current curriculum begins in this phase. An evaluation questionnaire is sent to schools. The IB Academic Division begins review of other syllabuses/courses, identifies strengths and weaknesses of the existing course via examiners and consultants, establishes review committees, and invites teacher participation. Various reports are produced at this stage, including assessment and literature review reports.
Year 3: Evaluation and development	In this phase, the process moves from evaluation to development. After a second questionnaire goes out to schools, the research and evaluation report is prepared and presented. The first development and review committee meetings are held. This all leads to the finalization of the curriculum model.
Year 4: Development	Curriculum development is ongoing at this stage. Trialing of assessment instruments begins, as does research and development of teaching and learning support materials. Several meetings are held to finalize the assessment model, and work continues on the syllabus and assessments. All work to date is reviewed and reported to schools.
Year 5: Development	Ongoing research and development of curriculum, syllabus, assessments and teaching and learning support materials continues, as well as trialing of assessment instruments. Meetings result in drafts of specimen questions and professional development and teacher support materials. Again, all work is reviewed and reported to schools.
Year 6: Development	The final draft of the subject guide is prepared and presented. Specimen papers, assessment markbands and teacher support materials are also completed and trialed with teachers. Work on accreditation begins.
Year 7: Development and implementation	The final subject guide and professional development and teacher support materials are published. IB Academic staff attend Subject-Specific Seminar (SSS) workshops. IB Assessment develops writing instructions for question/markscheme setters. Accreditation work for the new course nears completion.

Key tenets of DP curriculum review and development

1. Curriculum development in the IB is research-based.

Curriculum development research is not the same as general background research into a subject. It involves highly focused gathering and synthesis of information directly applying to the curriculum review, and is informed by a range of appropriate sources, including but not limited to: internal reports, textbooks, journals, national system curriculums, feedback from schools, requirements of accreditation bodies and regulators, universities and other knowledge partners. IB staff has a responsibility to read widely and remain informed, and higher education institutions are consulted in a variety of ways to ensure the relevance and quality of curriculum developments to prepare students for entry into higher education.

Curriculum development research investigates:

- the strengths and weaknesses of the current course, including feedback from schools
- other syllabuses from awarding bodies and curriculums around the world
- links with other IB programmes
- feedback from universities on suitability as a precursor to tertiary courses and developments
- recent developments in recognition and accreditation
- current pedagogical (curriculum and assessment) issues for students aged 16–19 and the subject (or group) under review
- current broader trends within the discipline.

Research is conducted into the theory and practice of teaching and learning in the relevant subject (or group). Academic and assessment research is reviewed, evaluated and prioritized on an

ongoing basis. During the development phase, the emphasis shifts from eliciting feedback about the current curriculum to obtaining formative reflections relating to the new course(s).

In the context of a global/multicultural approach to research, the IB consults schools and other external agencies (ie, exam boards, associations, etc) about the international dimension in the curriculum and considers how different subjects are assessed in different cultures and the impact this has on curriculum and assessment design.

2. Curriculum development within the IB is a consultative and collaborative process.

The IB curriculum review process is consultative and collaborative. Internally, IB Academic and Assessment leadership and staff, the IB Research department, staff representing other IB programmes, Professional Development staff and others provide important feedback and guidance throughout the process. Externally, consultants and other contributors (ie, examiners, external advisors and higher education institutions) are carefully selected according to a specified procedure to reflect a range of specialist knowledge, outside perspectives, experience within the programme, regional representation, types of schools, and cultural and linguistic backgrounds. Ongoing direct and indirect feedback from schools is also solicited and monitored, and schools and teachers are consulted both prior to and during a curriculum review. Whenever a curriculum development process develops new components and/or assessment instruments or practices, these are trialed in schools.

3. Curriculum supports the IB mission and the international dimension of the DP.

Curriculum review and development is always focused on evaluating and improving the subject's ability to support the IB mission and IB learner profile. DP curriculum development is concerned with giving students knowledge about global issues and the skills to work with the course material, and with developing the attitudes that lead to intercultural understanding. Each subject guide includes a statement on the international dimension that covers the knowledge, skills and attitudes relevant to the international dimension of the subject. The following are examples of guiding questions.

- How can the global importance of the subject be reflected and promoted in its aims, objectives, curriculum and assessment?
- How can international and cultural differences (of perspective, economic circumstances, social and cultural diversity) be recognized in the subject content?
- Does the course actively encourage students to engage with global issues?

4. Assessment plays a critical role in curriculum development.

Quality of teaching has the greatest effect on the quality of students' learning, and the nature of the final assessment has the greatest effect on the quality of teaching. Thus, assessments are considered consistently throughout the curriculum development process. Assessment in the DP must:

- place a strong emphasis on authentic performance assessment and higher-order cognitive skills
- resemble real-world situations and require students to demonstrate their knowledge, understanding and skills by creating responses or a product
- attach value to the process and the thinking behind the work, as well as to the final product
- support and encourage good teaching and learning
- be a useful, engaging activity in which students learn and practise how to apply important knowledge and skills for authentic purposes
- elicit the demonstration of higher-order cognitive skills (ie application, analysis, evaluation and synthesis) as much as knowledge and understanding.

The aims and assessment objectives of the subject (or group) are central. The aims are the learning experiences the IB wants students to follow, undertake and enjoy, and the attitudes the organization wants to foster through the study of the subject.

Assessment objectives describe the measurable and assessable knowledge, skills and understanding. As curriculum development progresses and the curriculum and assessment models are developed, the question at the forefront of consideration is: *Do the curriculum and assessment models enable the aims to be addressed and the objectives to be achieved and assessed?* These aims and objectives are developed in the light of the research, feedback from schools and the international dimensions of the subject (or group).

As well as designed to support the aims and pedagogy of DP subjects, assessment models are developed with careful consideration of: **validity, reliability** and **manageability**. In devising the assessment instruments the IB ensures that all the objectives can be assessed in an appropriate way, minimizing bias and maximizing comparability. While not all the objectives need be assessed in each component, objectives are proportionately assessed across all components.

5. All stages of the curriculum development cycle are fully planned and documented using a project management approach.

DP curriculum development is project managed within a set time frame by qualified staff and external experts with well-defined roles and responsibilities. All relevant aspects of the review cycle are documented and archived so that IB staff can easily access material and understand the process and decision-making that led to curriculum developments. Plans around risk assessment, communications and publications are developed and implemented.

6. Curriculum documents and supporting material are of a very high standard and reflect current IB philosophy and policy.

All curriculum documents and materials go through a thorough review and validation process, are fit for purpose, and follow rigorous publication procedures and practices. The documents are clearly and concisely written and consistent, both in content and terminology, with other IB documents. Where there are differences, these are agreed upon and made clear. All documents are produced in sufficient time to allow schools to properly implement the new course.

7. All curriculum developments inform the provision of professional development opportunities.

The IB ensures workshop leaders are properly trained to deliver the curriculum and provides workshop leaders with appropriate, relevant and up-to-date training material. Teaching and learning support material in support of curriculum delivery is developed, produced and made available to the IB teaching community.

About the IB: For more than 40 years the IB has built a reputation for high-quality, challenging programmes of education that develop internationally minded young people who are well prepared for the challenges of life in the 21st century and able to contribute to creating a better, more peaceful world.

For further information on the IB Diploma Programme, visit: <http://www.ibo.org/diploma/>. Complete subject guides can be accessed through the IB online curriculum centre, the IB university and government official system, or purchased through the IB store: <http://store.ibo.org>.

To learn more about how the IB Diploma Programme prepares students for success at university, visit www.ibo.org/recognition or email recognition@ibo.org.