

Implementing the IB Diploma Programme

**A practical manual for principals, IB coordinators,
heads of department and teachers**



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Chapter 1

Overview of the Diploma Programme

Marc van Loo, MSc, PhD

Marc van Loo brought together the team of authors for this text and subsequently managed the project towards completion. He started teaching the International Baccalaureate (IB) Diploma Programme (DP) in 1995 in Singapore at the United World College of South East Asia, where he was in charge of further mathematics and where he taught all four IB mathematics courses as well as TOK. He went on to develop his passion for experiential learning, through an educational resort he set up in nearby Indonesia (LooLa Adventure Resort), by taking up the positions of coordinator of Critical Thinking at Nanyang Technological University, and of Professor of Mathematics and Physics at Overseas Family College, a college at the forefront of educational innovation in Singapore.

Marc conducts corporate training programmes as well as school trips for children of all ages, and taught adults at Singapore's Open University's BSc programme in Mathematics from 1996 to 2000.

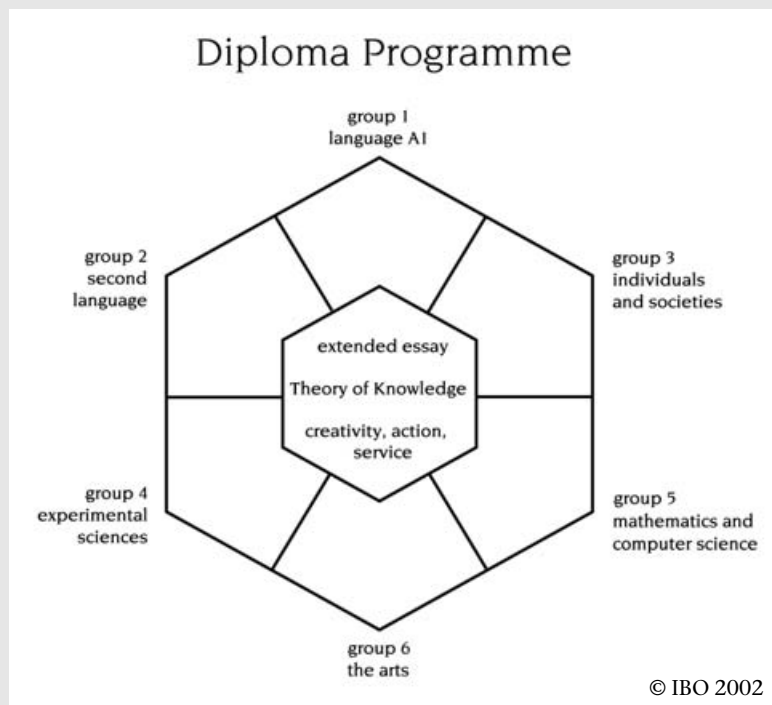
This chapter features a brief overview of the IB DP curriculum and the way it is assessed. It establishes the terminology used freely in the rest of the book.

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1 The IB diploma curriculum: the hexagon

The IB DP curriculum (offered in English, French and Spanish) is displayed in the IBO's trademark diagram, the hexagon (see figure 1.1).

Figure 1.1 The IB diploma hexagon



1.1 Constraints of the IB DP

All diploma students must complete the core programme (in the centre of the hexagon), and they must study six academic subjects – one subject from each corner of the hexagon (i.e. from each group). Of the six academic subjects, the IBO stipulates that at least three and no more than four subjects must be taken at Higher Level (HL), comprising 240 teacher–student contact hours; and the rest at Standard Level (SL), 150 contact hours. It is up to the student and the school advisers to determine which particular subjects are taken at HL.

The six subjects must be chosen subject to the following constraints.

First and second languages (groups 1 and 2)

The group 1 language is a literature course in the student's mother tongue or best language and is labelled A1. In Singapore, for example, this could be English A1 or Malay A1 or Chinese A1. A1 courses can be class-taught or, in the case of minority languages, self-taught. Forty-five A1 languages are offered, but other languages can be made available on request, given sufficient notice.

Group 2 is a second or foreign language programme that can be taken at *beginner's platform* (*ab initio*), *intermediate platform* (B), or *fluent platform* (A2),

offered to bilingual students). Unlike A1, only the most common group 2 languages can be taken at all three levels, e.g. Spanish *ab initio*, Spanish B or Spanish A2. Other languages, for instance Hindi, can only be taken as language B but are not available at *ab initio* or A2 level. Schools wishing to teach group 2 courses other than those automatically available must make a special request to the IBO.

Both group 1 and 2 languages can be taken at either HL or SL, *except ab initio* and self-taught A1 languages, which are only available at SL. Note further that the IBO does not impose English as a mandatory language (unless it happens to be the student's first language). If this brief summary strikes the reader as somewhat bewildering, that is because it is so. Chapters 12 and 13 provide further details.

Individuals and societies (group 3)

History, economics and psychology enjoy great popularity; geography, business and management, and information technology in a global society (SL only) are also widely taken; also available are philosophy, anthropology and Islamic history.

Experimental sciences (group 4)

These are usually biology, chemistry or physics, but also available are design technology and environmental systems (SL only).

Mathematics and computer science (group 5)

Choice is between one HL course and two SL courses, one of which is fairly light, while the other is an introduction-to-calculus type course. The HL course is hard, covering more than a typical US college first-year mathematics offering.

The arts and free electives (group 6)

The arts subjects are visual arts, music and theatre arts. As free elective the student can choose a third language or one of the group 5 subjects computer science or further mathematics (further mathematics is an SL course equivalent in content to a typical first semester university pure mathematics course, and has no equivalent in any national system). Usually, however, students use the free elective option to choose another social study or science subject to allow them a degree of specialization necessary for university.

Students are allowed to take a seventh subject, from any group, at the discretion of the school.

1.2 A few details on the IB core programme

The heart of the IB DP is embodied in its three mandatory core components.

Creativity, action, service (CAS)

Students must show sustained and active participation in CAS. Typically this amounts to half a day per week over the two-year course, or 150 hours altogether, keeping in mind that CAS should not be approached as an hour-counting exercise. The goal of CAS is that students learn about themselves,

about others, and about the wider community by *doing*, and that they learn to *reflect* on the knowledge thus acquired.

Theory of Knowledge (TOK)

This is a philosophical course that considers the ways in which people acquire knowledge as well as the typical strengths and weaknesses of each of these ways. Throughout, an awareness of the impact of culture on knowledge plays a key role. There is no equivalent of this course in any national education system, and the IBO prefers to see as many teachers as possible involved in the teaching of this inter-disciplinary course.

Extended essay (EE)

Students are required to write an extended essay of 4,000 words, for which there is again no equivalent in most traditional high school programmes. The extended essay is a research piece in an area of the student's choice (e.g. in mathematics, economics or language) which involves work outside the subject syllabus. University admissions officers often scrutinize this aspect of a student's work because the extended essay is typical of research work required at tertiary level.

1.3 School-based subjects and trans-disciplinary subjects

Within the hexagon, we finally briefly mention the role of the school-based subjects and the trans-disciplinary subjects, exciting courses that mark the future of the DP.

School-based subjects (SBS)

These are subjects developed by experienced IB schools in consultation with the IBO that typically meet a local need. About 20 such SBSs currently exist; they are only offered at SL.

Trans-disciplinary subjects (TDS)

These are subjects that satisfy the requirements of two hexagon corners at the same time, with a view to fostering cross-curricular understanding and to provide greater flexibility in package choice. These subjects are: text and performance (groups 1 and 6), ecosystems and societies (groups 3 and 4) and world cultures (groups 3 and 6). They can only be taken at SL and only at selected pilot schools, though once the courses have been tested and validated they will be on offer to all schools.

2 The assessment

The IB diploma subjects are examined by a combination of continuous coursework and external examinations at the end of the two-year programme. The exams are in the first three weeks of May, with resits in November. For most southern hemisphere schools the order is reversed, with students sitting examinations in November.

In each subject the student can gain a score of 1 (lowest) to 7 (highest). The maximum for the six subjects is thus $6 \times 7 = 42$ points. There are up to an extra 3 points – called *bonus points* – for both the TOK and extended essay together, but a student who fails both TOK and the EE or who fails to satisfy the requirements of the CAS programme will not be awarded a diploma.

The maximum score in a diploma is therefore 45 points (attained by about 0.2% of the worldwide cohort in May 2002). The minimum score needed to gain a diploma is 24 points (provided that all other requirements are fully satisfied). A good university will expect something like 28–36 points (about 4–6 points for each of the six subjects). Top universities might ask for 37–40 points.

Examination papers and syllabuses are written by teams of IB examiners and teachers comprising members from many continents and cultures. There is a five-year review cycle for all subjects which aims for continual improvement. Minor changes are introduced on a regular basis, and major changes every five years.

The IB diploma examination system is graded against absolute standards (with some mark adjustments if necessary) and so is not norm-referenced (i.e. there is no fixed percentage of each grade). This inevitably leads to a different grade distribution every year and for every subject (see section 2.1 below), but the IBO has made progress in moderating the differences. Grade inflation has not happened in the IB diploma. Since this sets the DP apart from many other examination systems, it is expected that the IBO is committed to keeping it that way.

All subjects in the hexagon, with the exception of the core, have a written examination, during a three-week interval at the end of the programme. Each exam consists typically of two or three papers, but the overall length is limited to a maximum of five hours per HL subject and three hours per SL subject. In addition, every subject has a coursework component, which may be internally assessed (and externally moderated by the IBO), or internally supervised but externally assessed. The assessment percentage contributed by the coursework varies, as illustrated in figure 1.2.

Oral and written communication is stressed, as are group work and analytical skills. The IBO encourages students and schools to take the initiative, and thus favours coursework as a means of assessment; it is held back from giving coursework greater weight by the entry requirements of many universities.

The system of assessment is recognizable to anyone familiar with US or UK examination board methods: there are standardization, moderation and grade award meetings. The whole assessment process is completed six weeks after the last examination, and results are given to students by a secure PIN number in the first week of July (or January for November candidates).

Figure 1.2 Assessment weight of coursework

Group	Coursework
Group 1: Language A1	30%
Group 2: Second language	30%
Group 3: Individuals and societies	20–30%
Group 4: Experimental sciences	24–36%
Group 5: Mathematics and computer science	20%
Group 6: The arts	30–50%
TOK	100%
Extended essay	100%

2.1 Statistical analysis of subject grade distributions

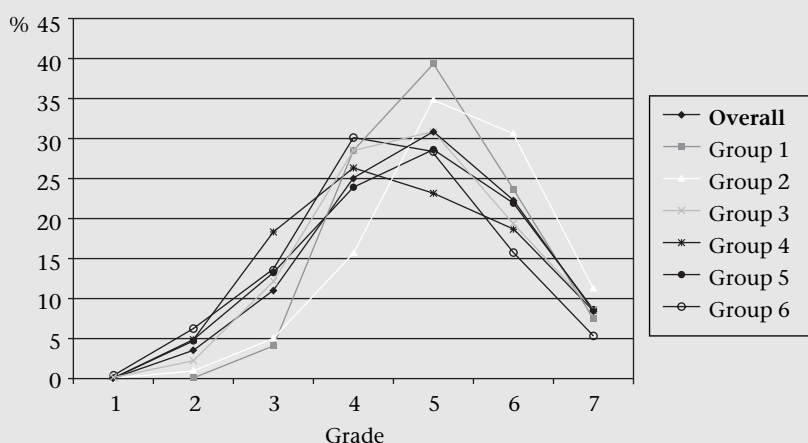
Figures 1.3 and 1.4 show a statistical analysis based on the IBO leaflet of raw data that goes under the name Statistical Bulletin (published twice a year after each examination). Figure 1.3 lists two important statistics. The *average grade* for each group indicates roughly how difficult the group is for the student. The *standard deviation* is a measure of the spread of the grades (i.e. the ability range of students) and thus roughly indicates how difficult the subject is for teachers to teach, especially for teachers who face the full ability range. The significant differences in these two numbers across the groups clearly demonstrate the absence of norm-referencing; figure 1.4 illustrates this visually.

Using these statistical interpretations, we see that sciences are somewhat tough on both student and teacher; arts grades are the toughest of all; the individuals and societies group is the ‘model citizen’ of the DP; while languages are somewhat gentler on both student and teacher.

Figure 1.3 Average grades and their standard deviations

May 2002	Average	S.d. (spread)
Overall	4.8	1.5
Group 1: Language A1	5.0	0.9
Group 2: Second language	5.3	1.2
Group 3: Individuals and societies	4.8	1.4
Group 4: Experimental sciences	4.6	1.8
Group 5: Mathematics and computer science	4.7	1.7
Group 6: The arts	4.4	1.7

Figure 1.4 Grade distribution per group, illustrating absence of norm-referencing



Chapter 2

Quality assurance and maintenance of the International Baccalaureate Diploma Programme

John Goodban, BA (Econ), Dip Ed

John Goodban was a founding member of staff of the United World College of South East Asia, Singapore where, between 1971 and 1991, he served at various times as head of the faculty of humanities, head of middle school, director of development and deputy headmaster. He taught IB geography Higher Level (HL), geology Standard Level (SL) and school-based subjects (SBS). He was for many years the Diploma Programme coordinator (DPC). From 1991 to 2002 he was IBO director for the Asia-Pacific region. To list just a few more achievements in his long career: member of the conceptual team for the development of the present IB Middle Years Programme (1984–92), chairman of the IBO creativity, action and service (CAS) committee (1990–97), member of the IBO Senior Management Team (1999–2002), coordinator of large-scale teacher-training workshop programmes – over 1,200 regional workshops arranged and conducted throughout the Asia-Pacific region (1991–2002) – author of the first IB diploma trans-disciplinary syllabus ‘Science, technology and social change’, and finally, author of the Longman geography series ‘Living in Cities’.

In this chapter John Goodban provides a clear account of what the International Baccalaureate Organization (IBO) expects from schools that wish to introduce the IB Diploma Programme (DP). The emphasis throughout is on how the IBO guards and maintains the quality of its curriculum, its participating schools and itself as an organization. The next few chapters examine in detail the practical implications of this at the school level.

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1 Introduction

Since its formal foundation in 1968, the IBO has made determined efforts to ensure that the quality of its various services to schools continues to meet the highest standards. The challenge of quality assurance in national education systems is a considerable task and, when applied to the complex diversity of the international arena, it is even more daunting. That so much has been achieved in the development of the DP during its relatively short existence owes much to the quality of its curriculum and its assessment. As a result, the diploma today is widely recognized and accepted by universities in more than 110 countries as a first-class qualification for entry to tertiary studies. Increasingly it is described as the gold standard in international education; a reputation that has been hard earned, is well deserved and is an ongoing challenge to maintain and to develop further.

Quality assurance and quality maintenance focus on both schools and the IBO. The overall quality of a school's DP and its delivery to students, and likewise that of the IBO, in terms of the curriculum, its assessment, corporate services and structures, are all vitally important. We all know the importance of quality maintenance of a new car to ensure that it continues to function efficiently or, in the case of a new house, to prevent it from falling into a state of disrepair and ruin. Not surprisingly, quality international education also requires quality maintenance. It is one thing to develop a new curriculum and innovative assessment methodologies, and to train teachers to teach them; it is quite another to ensure that standards do not decline, that development does not stagnate, that resources are restocked – and that the all-important teacher is not forgotten.

In this chapter, *quality assurance* is defined as being able to meet and adhere to certain prescribed IBO aims, objectives and requirements. It is measured against specific criteria and conditions that are applied fairly and equally to all schools that are preparing for authorization to teach the DP and to those that are authorized to teach it. However, not only are schools asked the questions: 'How good are you?' and 'Can you demonstrate how you meet our requirements?'; the IBO addresses similar questions to itself: 'How valid is the currency of the curriculum and its assessment, and is the organization responding appropriately to the needs of a rapidly changing, increasingly sophisticated adult world in which students will soon have to take their place?'

2 The authorization of schools

Arguably, the procedures governing the authorization of new schools to teach the DP represent the single most important of the IBO's quality assurance strategies. All schools are required to submit an application to the regional office, to be followed by an authorization visit and the approval of the application by the IBO director-general before teaching can begin. No school is permitted automatically to adopt the DP nor, for that matter, to purchase it by credit card payment or by any other financial transaction. In other words, it is not possible simply to buy your way into the IB and to become an IB world school.

In order to be eligible to teach the DP every school must first have its application approved by the IBO director-general. This approval will not be granted until the school has submitted a full application and required supporting documentation to the regional office, and has received a successful official authorization visit which this office will arrange and for which the school must pay the costs. However, no professional fees are paid to any members of the visiting authorization team. The team generally comprises a representative from the regional office plus one or two other members, usually an experienced DPC and a senior administrator from authorized schools situated within a reasonable distance but never from neighbouring institutions (this is to ensure a greater degree of objectivity).

The prime mover in the lead-up to the authorization visit and the visit itself is the IBO regional office. The coordination of the various procedures is the overall responsibility of the regional director or the regional DP manager. However, in a very large region, such as the Asia-Pacific, it is possible that the appropriate sub-regional representative would take on this particular responsibility.

The applicant or candidate schools should make every effort to familiarize themselves with all aspects of the DP. While a detailed internal school audit is of vital importance from the curriculum, resources, pedagogic and financial viewpoints, the staff designated to teach the IB should make every effort possible to visit nearby authorized IB schools that are already experienced in teaching the DP. Ideally, occasional future visits should also be arranged. A great deal can be learned through joint departmental staff meetings, sitting in on IB classes and talking with students.

The candidate school needs to give some serious thought early on as to when it intends to submit its application and when it will be ready for the official authorization visit. There is no fixed period that must separate the authorization visit and the time when a school first makes any serious move to go ahead and introduce the DP. Very few schools can be properly prepared in less than a year. Many schools need or prefer to take considerably longer, although a period of two years or more between the initial application and the authorization visit is exceptional and such an extended period of time may become unsettling for teachers and the rest of the school community. Most importantly, for all concerned, is that the school should be entirely prepared, as a premature visit will almost certainly be costly in terms of funding a repeat visit and will incur an extra delay of up to another year before authorization is granted.

A chronological overview of the whole authorization procedure is given in section 2.7.

2.1 The aims and objectives of the DP

In order to achieve authorization, every new school must be able to demonstrate that it has a good understanding of the IBO's overarching aims and objectives of the DP, which are to:

- provide an internationally acceptable qualification for entry into higher education
- promote international education and intercultural understanding
- develop a holistic view of knowledge that emphasizes the connections between the various fields of learning

- educate the whole person, emphasizing intellectual, personal, emotional and social growth in a student-centred philosophy
- develop enquiry and thinking skills, and the capacity to reflect upon and to evaluate actions critically.

Without exception, all DP schools must be fully committed to achieving these aims and objectives. Directly linked to them are the specific *criteria and conditions* for the admission of new DP schools and it is a strict IBO requirement that candidate schools must satisfy the demands of all of them. These are clearly set out in the application documents that schools receive from their particular regional office and to which every school must declare its full commitment. It is this commitment that bonds together all IB world schools.

2.2 Criteria and conditions for authorization

When a school expresses a serious interest in the DP, the ongoing process of quality measurement commences. Quality assurance for the DP is of paramount importance throughout the authorization procedures for new schools. As a not-for-profit organization, the IBO is not in the business of growing larger in terms of promoting the number of authorized schools, because growth alone is not a pre-eminent concern. But *quality* is.

First and foremost is the quality of every school that wishes to introduce the DP. The single most important aspect of the authorization visit is to determine whether the candidate school is able to demonstrate unequivocally that it has understood the import of the criteria and conditions for the authorization of new schools and that it is able to meet the demands of each one in practice.

The IBO's *Criteria and Conditions for Authorization* of new DP schools, as set out in the IBO's *DP School Guide to the Authorization Visit*, are standard worldwide. Similarly, the overall authorization procedures are globally common. These are enormously important in safeguarding the integrity of the quality of the new candidate schools that are approved by the IBO director-general. In recognition of the importance of well-defined global standards, the IBO has recently focused considerable attention on rewriting the authorization documents, including the production of new guidelines for the school and the authorization team on the actual visit. To be an authorized DP school is increasingly accepted around the world as being an internationally recognized statement of excellence.

The key criteria and conditions for authorization and their separate and conjoint significance will now be examined and explained in turn.

- ***IB DP candidate schools shall be committed to the promotion of international understanding through education as expressed by the objectives and practices of the IBO.***

This ideal, the promotion of international understanding along with intercultural awareness, connects directly to one of the four fundamental aims (to promote international education) of all IBO curricula and, possibly, is the most complex to achieve in many schools. The IBO requires all schools to embrace and to espouse the importance of developing certain international values in students, especially a strong sense of international awareness,

intercultural understanding, tolerance and compassion. Candidate schools for the DP must recognize from the start that this goes far beyond holding the traditional annual United Nations Day celebrations, eminently worthy though these may be. In international schools, where there is significant advantage due to an omnipresent international milieu of students, international understanding and intercultural awareness are far easier to promote, especially in schools such as the United World Colleges. However, in national schools, which comprise nearly 50% of the DP schools' total constituency, where the everyday classes are often more likely to be monocultural or virtually so, no immediate sense of internationalism may exist.

To an extent, ready access in the library, classrooms and laboratories to the internet and the schoolwide use of IT, including IBNET and the IBO's Online Curriculum Centre (OCC), can improve this situation and offer some remedies to the problem, but these alone are insufficient. The whole school staff, from the senior administration to the most junior classroom teacher, must be encouraged to be fully committed to exploring and establishing a variety of ways in which the international is brought frequently to the forefront of everyday school life, not just in the assembly hall but particularly in the classroom, the laboratory, the workshop and during activities. The major player here must be the teacher. This is not to say or imply that internationalism is to be taught, since in its intrinsic sense this cannot be done effectively. The inherent *values* of international and intercultural understanding, respect and tolerance cannot be taught or learned directly as such. Like morals, they can only be absorbed organically by the student over a period of time, and certainly not through any radical, revolutionary form of instant enlightenment, but rather through example, argument and reflection. Thus teachers must endeavour to introduce regularly to their classes, in an uncontrived and relevant manner, international and intercultural issues for discussion that can be linked to their own subjects. There will be opportunities for teachers when participating in IBO-approved teacher-training workshops to discuss with and learn from colleagues in other schools proven ways in which the challenge of internationalism in schools has been successfully approached elsewhere. It is of paramount importance to note that the IBO expects DP students to learn to recognize that to be different, to look different, to think differently and to live differently is not wrong, that diversity is to be celebrated, not feared, and that the variety of cultures and attitudes that make for the richness of life should be respected.

However, it is certainly not only in the six subject areas of the DP hexagon that there is room for internationalism. The Theory of Knowledge (TOK), the catalyst of the DP, requires students to reflect on such directly related issues as bias, opinion and fact. A creativity, action, service (CAS) programme that encourages students to enrol in service activities that involve them in direct contact with people of the host country (in the case of international schools) and with minority communities (in national schools) can significantly enhance the international focus and understanding of the students.

A candidate school, when submitting its application to the IBO regional office and during the authorization visit, should be well prepared to demonstrate its commitment to internationalism and interculturalism and the ways in which these issues have been integrated across its entire DP.

- ***Schools shall demonstrate to the IBO that they will have the required teaching faculty, administrative staff and other resources with which to implement the IB DP successfully.***

The IBO entrusts to all diploma schools worldwide the great responsibility for the quality of the delivery of its curriculum in the classroom. It is vital that candidate schools ensure that the quality of the DP staff-designate is the highest possible. Certainly, teachers must be university graduates and their professional qualifications must be appropriately geared for teaching their subjects at the two pre-university year levels occupied by the DP. It is also advantageous if a candidate school is able to recruit a few staff who are experienced DP teachers from other IB schools, particularly when they are skilled and knowledgeable in one of the more complex curriculum areas such as languages.

It is of utmost importance when staffing the DP to consider carefully class sizes. Although there is no absolute prescription for class size, it is imperative to bear in mind that the overall nature of the DP curriculum is fundamentally concept based and process led and, for the most part, absolute content has a much more subordinate role. The teacher has a significantly diminished didactic role to play and class discussion, general and detailed exchanges of opinion, the Socratic critical approach to learning and understanding and experiential discovery and research, are equally important and active. This can only work well when class sizes are reasonably restricted. Experience dictates that HL classes should not exceed a student population of 20 and SL classes should not rise above 25 students.

The emphasis placed on independent research and the students' growing responsibility for their own learning requires careful accommodation. Adequate research facilities and general study areas should be readily available, some of which should be in the library. The IBO places much emphasis on all IB schools having a high-quality library, and a candidate school must present a comprehensive budget for the library, focusing on the immediate future and forecasting its ongoing targets. It is strongly recommended to employ a fully trained and well-qualified librarian, ideally a teacher-librarian, to be responsible for the library. It is also expected that this important member of the staff will have a sound overall understanding of the DP curriculum and be sufficiently informed to be able to advise students on such important issues as resourcing their TOK assignment or researching the extended essay. Occasionally, regional offices organize librarians' conferences and workshops, which are highly recommended to candidate and authorized schools. There are a few associations of IB librarians scattered around the world that work closely with the regional offices and these help to play a very useful supportive role for librarians in DP schools.

It may be argued that the single most important investment any authorized school can make in its DP is in teacher-training. Such investment should be not only in initial training, but also in a carefully planned, budgeted and sequential development programme for all staff over a five-year cycle, which would fit closely with the IBO's own five-year curriculum review and development cycle. However, in terms of meeting the demands of the authorization visit, the IBO has made it very clear in its new application form, published at the end of 2002, that candidate schools must register *all* of their DP teachers-designate for IBO-approved teacher-training workshops before the visit takes place. Nevertheless, it must be emphasized that this is only the initial training stage and that the IBO expects to witness far more in the future as an ongoing

commitment from all authorized schools to professional development and refreshment. The current and future school budget provisions for teacher-training should be presented with the other supporting application documentation.

Closely allied to workshops are conferences. All regions organize an annual conference for their schools. It is expected that authorized schools will give their full support to this event, as it provides an ideal opportunity not only to catch up with colleagues from other schools in the region but also to meet with IBO senior staff from the head office in Geneva, the IB Curriculum and Assessment (IBCA) office in Cardiff and the regional office in charge of the conference. Clearly, this needs to be factored into the budget as well.

It is unnecessary for schools to have extravagant resources to support the DP. In all regions where the programme is successfully taught there are many schools that have a limited budget, but they are all able to resource their programme satisfactorily. It is particularly advantageous for these schools that a substantial part of the curriculum is not content focused and, therefore, schools have a considerable freedom to select their own exemplar material, which often may be found locally and relatively inexpensively. As long as schools fully understand the specific resource requirements of the various subjects that they are planning to offer, there is no necessity for these to be expensive. Useful advice on means of acquiring resources at reasonable cost can be readily obtained at workshops, on visits to experienced schools and direct from the regional office.

- ***Schools shall formally agree to bind themselves to full acceptance of all IBO requirements encompassing the effective conduct of the DP, with particular attention to its student-centred philosophy, TOK and CAS. Schools shall appoint an IB DPC and a CAS coordinator.***

Schools must recognize that the DP has its own suite of specific requirements in order to satisfy fully the philosophy and teaching of the curriculum. While there must be a firm assurance that the quality of the designate IB staff is high, it is also important that a candidate school can clearly illustrate to the authorization visiting team, both in its documentation and during the visit, that the manner in which it intends to teach the DP will be in strict accordance with the IBO's requirements.

The construction of the school's timetable must provide a two-year programme of concurrent learning across the curriculum, with a balanced proportion of time allocated to each subject offered, that meets the IBO's minimum requirements at HL and SL. In addition, a minimum of 100 hours of teacher-student contact time must be provided for the TOK programme. A school should also demonstrate its understanding that the learning environment of the DP must demonstrate a recognition of the importance of the empowerment of the students for a significant degree of their learning, that students will be given ample opportunity for independent work and research, and that the time allocated per subject is teacher-student *contact* time which should not be dominated by formal didactic pedagogy. Schools must also recognize that all work produced as part of a subject course that is internally assessed by the teacher should always be viewed as an integral component of the work of a normal school day along with routine homework assignments. Every

effort should be made not to add this on to the existing timetable. If this happens, it is likely to become a major cause of student overload.

Undoubtedly, the key administrative staff appointment in a DP school is the DPC, who is responsible for the general administration of the programme, for internal and external communications and for the control and security of the May or November examination sessions. The IBO channels all official communications through the DPC, apart from the statement of account for the annual subscription and the examination fees. These are sent direct to the head of school. The IBO regularly offers training workshops for new coordinators and there is an annual conference in every region for heads of schools and coordinators which schools are expected to support. The appointment of a DPC is a mandatory requirement of all schools.

New schools should also appoint a staff member to be responsible for the CAS programme. Although a student's CAS performance is not rewarded in the form of bonus points (as is done for high achievement in the TOK and extended essay), CAS is a vital element in the DP, with its own requirements which students must satisfy or risk not receiving the diploma even if all other requirements are in order.

Thus the qualities of the member of staff appointed to coordinate CAS must include a sincere commitment to and understanding of the aims and objectives of the programme and the administrative abilities to run it efficiently with an effective system for monitoring student performance.

- ***The programmes of the IBO should not be marginal in 'IB world schools'; it is expected that they will positively influence those sections of a school not following an IB programme.***

The IBO certainly does not stipulate in any way that the DP must be the only curriculum offered in the senior high school. However, it must be made very clear that the programme does have a major role to play in the school and that the intrinsic values espoused by the IB DP are relevant to the whole school, are firmly embraced by the published school mission statement (or equivalent) and will have an influential role in any sections of the school that do not have an IB programme.

Another condition that is very closely allied to this is that all schools must be unequivocally committed to teaching the full DP and must recognize that certificate courses have secondary importance (in the past this was not always the case, especially in North America). *Certificate* students are not bound by the rules governing the diploma and are not required to take the TOK programme, write an extended essay or fulfil the CAS requirements. Nor are certificate students restricted in any way to the number of subjects that they take at HL or SL. Without a doubt, the all-important reason for teaching the IB is the DP and the benefits that are to be derived from it by diploma students.

Today, the IBO is much more stringent in its authorization of new schools in this area and it must be unquestionably shown that any certificate courses they may be intending to offer are subordinate to their DP, and will be specifically for students who are not intellectually or academically able to undertake the full diploma. As a consequence of this stricter policy, there has been a marked increase over the past few years in the proportion of diploma students who now comprise more than 50% of the total candidature for both the May and November examinations. There has also been a marked increase in the

proportion of diploma students over certificate students in many well-established DP schools, where there is a greater awareness of the benefits and advantages that the diploma has to offer over certificate-only courses.

A closely allied issue to a school's commitment to the DP is *anticipated* subjects. The IBO permits diploma candidates to take up to a maximum of two SL subjects at the end of the first year. Originally, anticipation was to serve the interests of students who had very strong language Bs and were capable of achieving the highest grades at SL at the end of year 1 of the diploma. However, in some schools the policy has emerged of all students anticipating one or two subjects. The IBO frowns upon this system of getting two subjects 'out of the way', which it considers to be alien to the diploma aim of encouraging concurrent learning across the curriculum of a two-year programme.

While several other conditions for authorization are prescribed and strictly applied by the IBO, these are the main ones as far as assuring the basic qualities of the curriculum, resourcing, pedagogy and intrinsic values of all candidate schools are concerned, and their importance during the authorization procedures should never be underestimated. Nor, as will be seen, are they only of interest to the IBO during the initial authorization stage, since they continue to have undiminished importance for as long as a school is permitted to offer the IB DP.

2.3 Preparing the school's communities

Unsurprisingly, it has been the IBO's experience over the years that, as a general rule, the schools that progress the most smoothly and successfully through the implementation procedures of the DP are those that have fully informed their various communities from the beginning. By being an integral part of the decision-making processes and having a sense of being closely involved from the beginning with this major school development, the introduction of the DP should be welcomed by the whole school community and receive the full support of the school board, staff, parents and students.

In the great majority of cases it has been shown that this early support from the community has been readily sustained and has increased in strength as the programme has matured. As a consequence, the school's DP has been built on firm foundations where there have been little or no resentment or objections to its introduction. Thus school boards and administrators that are seriously considering the DP for their schools are urged to be as transparent as possible from the earliest stages. Experience has shown that if this is the school's policy, then the short-term and long-term support for the programme is strong from the time when the programme is first considered, from the whole teaching faculty (not only those colleagues who are designated to teach the programme), the parent body and the students, in particular those who would comprise the first cohorts of diploma students should its introduction proceed. Occasional meetings for parents and regular faculty meetings are essential in order to keep open all channels of communication. Such meetings will contribute enormously to avoiding any possible future grievances, suspicions or misunderstandings. It is also recommended that a representative from the IBO regional office be invited to speak at a parents meeting. Such a meeting offers an excellent opportunity for parental concerns to be raised, to discuss the DP in general and better to

understand the advantages of the diploma as an entry qualification to higher education.

Schools that are prepared to invest significant time in introducing their communities to the IBO and the DP will not regret this. The outcome for most schools will be a strong support for the programme. In the case of a small minority of schools where such support is not forthcoming, there will still be savings benefits in the form of the probable avoidance of any future angst, programme collapse and the unnecessary acquisition of unwanted pedagogical and curricular resources. Because the IBO is not a profit-making foundation, schools are under no pressure from the organization to adopt the DP, or any of its other programmes, and they will certainly not be pressurized by the organization to become IB world schools, which would definitely not be in the interests of the IBO or of quality assurance.

2.4 Financial issues

Every school that is considering the introduction of the DP must give serious thought to all of the financial implications that will be involved both in the short term and the longer term. It is imperative, and wholly in the interests of the school's future DP, that there is a very clear understanding of what budget provisions must be made to meet the various costs.

Comments are sometimes made, incorrectly, to the effect that the diploma is a very expensive programme that only the richest selective schools can afford to implement and to maintain. Fortunately, today, this opinion is held far less widely, and there is an impressive range of schools now teaching the programme – rich, poor, large, small, independent, national, single-sex, coeducational, day and boarding. Nevertheless, it is a fact that an independent school in a developed world country is far more likely to be able to afford the programme than a national school in the developing world unless it receives some additional financial assistance from, for example, the state or local education authorities. Despite the financial challenges that the programme presents, there are still many schools throughout the world that have successfully implemented the DP and are certainly not considered to be rich in any financial sense.

In the earliest stages of considering the DP it is essential that a whole programme audit is carried out in which the costs are calculated within two distinct areas: the initial setting-up expenses leading to authorization, and the forecasted, ongoing expenses once the programme is up and running, including the examination fees over at least the subsequent four to five years. The most significant of these costs are undoubtedly the initial costs.

The initial costs

Purchase of official IBO publications

These may be ordered and paid for online from the IBO website: www.ibo.org. They are the curriculum documents including the subject guides (syllabuses), past examination papers and mark schemes. These are essential purchases for all schools very early on in the consideration stage.

Teacher-training

All DP teachers-designate need to be enrolled in introductory teacher-training