Developing MYP units

Action: Teaching and learning through inquiry

The “Action” section of the MYP unit planner identifies the taught curriculum. Teachers use this section to focus on how students will learn. Teachers plan and record the content, learning process and resources that they use in the course of the unit.

Inquiry-based teaching and learning is not a linear process; the information gathered about one aspect often affects other dimensions of the planning process. For example, a review of available resources might require teachers to plan for different assessment tasks. Similarly, a review of students’ prior learning may mean that teachers need to allocate more time for the development of skills and understanding than originally planned.

Teachers should refer to the statement of inquiry to ensure that concepts and context inform the selection of learning experiences, formative assessment and teaching strategies.

Content

There is space in this section of the planner to list subject-specific content. This content may be mandated by state or national systems; it may come from school-based requirements or the school’s curriculum overview; or it may be derived from a range of education standards.

At the subject-group overview level of planning, content constitutes the disciplinary knowledge and skills to be taught and learned in each year of the programme. Such an overview develops a clear progression of learning, including the disciplinary topics that students encounter in the course of their MYP experience.

The starting point for identifying significant content is students’ current understanding. The goal of teaching and learning in the MYP is the active construction of meaning in which students build connections between their prior understanding and new information and experience that they gain through inquiry. “Front-loading” content (efficiently building background knowledge) can be important, introducing a base from which to teach skills or practise critical thinking. Effective inquiry often is not possible without facts and prior knowledge.

Schools that follow a national, state or local curriculum need to align the content standards (aims and objectives) or programme of study with MYP requirements. For schools with no required curriculum, teachers are responsible for choosing appropriate content that will enable students to reach MYP subject-group aims and objectives. Schools can expand the scope of topics and depth of treatment according to their individual needs, preferences and possibilities.

Description of learning process

As schools implement the MYP, teachers must design learning experiences that allow students with a range of needs to meet the subject-group aims and objectives. Teaching and learning in all IB programmes is:

- based on inquiry
- focused on developing conceptual understanding
• developed in local and global contexts
• focused on effective teamwork and collaboration
• differentiated to meet the needs of all learners
• informed by assessment (formative and summative).

These pedagogical principles provide flexibility and empower teachers to develop their approaches to teaching. Teachers use a wide range of teaching strategies and approaches in the classroom to create student-centred learning that inspires confidence and personal responsibility. Students need to be actively engaged in learning, and the voices of both teachers and learners are essential in an IB education.

Learning experiences and teaching strategies

Teachers should purposefully choose strategies and learning experiences that are aligned with the unit’s statement of inquiry; help students meet subject-group objectives; support the development of effective ATL skills; and meaningfully prepare students to achieve high levels of performance in the unit’s summative assessment. The specific learning experiences and teaching strategies devised by teachers depend on available resources, the content to be taught and on the subjects themselves.

Teachers should ensure that a range of learning experiences and teaching strategies is:
• embedded in the curriculum
• built upon prior learning
• age-appropriate, thought-provoking and engaging
• based on the differing needs of all students, including those who are learning in a language other than their mother tongue, and students with learning support requirements
• open-ended and involves teaching problem-solving skills.

Teachers should choose strategies that provide for learning through disciplined inquiry and research; involve communication of ideas and personal reflection; and give students the opportunity to practise and apply their new understandings and skills.

Formative assessment

Formative assessment can take place before, during and after the substance of a unit is taught. Teachers need to develop ways of ascertaining students’ prior learning so that they can plan appropriate learning experiences and teaching strategies.

Teachers also need to consider how to monitor and support learning as students engage with the unit. Formative assessment (assessment for learning) provides teachers and students with insights into the ongoing development of knowledge, understanding, skills and attitudes. Assessment for learning is “the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there” (Black et al. 2002). Effective formative assessment also provides teachers and students with a way to explore personal learning styles as well as individual student strengths, challenges and preferences that can inform meaningful differentiation of learning.

Formative assessment can also provide important opportunities for students to rehearse or refine performances of understanding as they prepare to complete summative assessment tasks.

Peer and self-assessment are often valuable formative assessment strategies.
**Differentiation**

Differentiation (modifying teaching strategies to meet the needs of diverse learners) can build opportunities in which each student can develop, pursue and achieve appropriate personal learning goals. When considering pedagogical approaches to meeting individual learning needs, teachers also need to consider each student’s language profile.

The IB identifies four important principles to promote equal access to the curriculum for all learners and to support the development of the whole person through differentiated teaching and learning, as illustrated in figure 10.

![Figure 10](image)

**Figure 10**
Principles of good practice for differentiated learning

For detailed information, see the IB publications *Learning diversity in the International Baccalaureate programmes* (2010) and *Language and learning in IB programmes* (2011). Universal design for learning also provides a set of principles for curriculum development that gives all individuals equal opportunities to learn.

Teachers can differentiate teaching and learning by providing examples (work samples or task-specific clarifications of assessment criteria); structuring support (advance organizers, flexible grouping, peer relationships); establishing interim and flexible deadlines; and adjusting the pace of learning experiences.

All students should be able to access the curriculum through the specific design of the unit and through the strategies that teachers employ to differentiate the content, process and outcomes of learning. Differentiation may include offering students various modes of interpreting materials, whether visually, aurally or kinaesthetically, and allowing students to choose alternate modes of presentation for their performances of understanding (for example, oral presentation, writing, or a practical method such as leading a peer-to-peer workshop).
Resources

Teachers need to investigate available resources and consider what additional resources might be necessary for the unit. Important resources to consider include:

- instructional materials and classroom technologies
- textbooks and other written and visual texts
- teaching materials developed by businesses and not-for-profit organizations
- educational games and simulations
- teaching aids and manipulatives
- learning environments beyond the classroom
- students’ diverse languages and cultures
- families, experts and other primary sources in the school and the community
- school, university and community libraries
- digital resources, including the internet.