

Middle Years Programme Unit planner

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
<p>Q. What is a key concept? A. Key concepts are broad, organizing, powerful ideas that have relevance within and across subjects and disciplines, providing connections that can transfer across time and culture. (FPIP,pg. 15)</p> <p>Q. Why is this important? A. Key concepts are powerful, abstract ideas that have many dimensions and definitions. They have important interconnections and overlapping concerns. Key concepts engage students in higher-order thinking, helping them to connect facts and topics with more complex conceptual understanding. Key concepts create “intellectual synergy” (Erikson 2007) and provide points of contact for transferring knowledge and understanding across disciplines and subject groups. (FPIP,pg. 15)</p> <p>Q. What are the MYP prescribed key concepts? A. The MYP identifies 16 key concepts to be explored across the curriculum. Teachers use key concepts from their own subject group(s)—as well as key concepts from other subject groups—to plan disciplinary and interdisciplinary units of work. (FPIP, 56)</p> <p><i>Adopted questions and answers from “Further guidance for developing MYP written curriculum”, pg. 5)</i></p> <p>Q. Do teachers have to use all key concepts from the subject group each year? A. No.</p> <p>Q. Do teachers have to use all 16 key concepts in each subject/course they teach each year? A. No.</p> <p>Q. Do subject-group teachers have to use that subject group’s focus key concepts every year? A. No, but it would be good practice.</p> <p>Q. Do subject-group teachers have to use that subject group’s focus key concepts before choosing any other key concepts from which to develop an MYP unit plan? A. No.</p> <p>Q. Should subject-group teachers use key concepts that are not that subject group’s focus only in interdisciplinary units? A. No, teachers can use any key concept to develop a unit.</p> <p>Q. Are there limits to the number of key concepts that teachers can use to develop a unit? A. No, but it is advisable to choose only one key concept because these ideas are big enough to merit individual consideration.</p>	<p>Q. What is a related concept? A. <i>Related concepts</i>, grounded in specific disciplines, explore key concepts in greater detail, providing depth to the programme. They emerge from reflection on the nature of specific subjects and disciplines, providing a focus for inquiry into subject-specific content. (FPIP,pg. 15)</p> <p>Q. Why is this important? A. Related concepts promote depth of learning and add coherence to the understanding of academic subjects and disciplines. They are grounded in specific subjects and disciplines, and they are useful for exploring key concepts in greater detail. Inquiry into related concepts helps students to develop more complex and sophisticated conceptual understanding. Related concepts may arise from the subject matter of a unit or the craft of a subject—its features and processes. (FPIP,pg. 15)</p> <p>Q. What are the MYP prescribed related concepts? A. Related concepts and their definitions are found in each MYP subject-group guide, along with examples of how they are used to develop MYP units. Teachers can develop additional related concepts to meet the needs of students and local or national curriculum requirements. (FPIP,pg. 57)</p> <p>Q. Are there limits to the number of related concepts that teachers can use to develop a unit? A. For each unit, teachers identify one or more related concept that extend(s) learning, lead(s) to deeper understanding, or offer(s) another perspective from which to understand the identified key concept(s). (FPIP,pg. 57) A. Most teachers find that two or three related concepts provide the right scope for a meaningful inquiry. (“Further guidance for developing MYP written curriculum”, pg. 5)</p>	<p>Q. What is a global context? A. A learning context is a specific setting, event or set of circumstances, designed or chosen, to stimulate learning. The context, therefore, should have a relationship to the learner, the learner’s interests and identity, or the learner’s future. (FPIP,17) In the MYP, learning contexts should be (or should model) authentic world settings, events and circumstances. Contexts for learning in the MYP are chosen from global contexts to encourage international- mindedness and global engagement within the programme. (FPIP, 18)</p> <p>Q. Why is this important? A. In the MYP, global contexts are at the heart of inquiry and active learning, and can encourage students to take responsible action in a variety of situations encountered through the curriculum. For teachers and students, global contexts provide a means to inquire into subject content by questioning, explaining, discovering and doing. (FPIP, 73)</p> <p>Q. What are the MYP prescribed global contexts? A. The MYP identifies six global contexts for teaching and learning that are developed from, and extend, the PYP’s transdisciplinary themes.</p> <p><i>Adopted questions and answers from “Further guidance for developing MYP written curriculum”, pg. 5)</i></p> <p>Q. Do teachers have to use each global context in each subject/course they teach each year? A. No.</p> <p>Q. Does the subject-group overview have to show that, over the course of the programme, students will have encountered all six global contexts at least once within each subject group? A. No.</p> <p>Q. Can teachers use more than one global context in a unit? A. Yes, but most teachers find that one exploration (or one aspect of that exploration) of a single global context provides the most effective means for students to develop contextualized understanding. Global contexts are interconnected by their very nature, so it is natural for them to overlap and to provide related but separate perspectives on many concepts.</p> <p>Q. Does the subject-group overview have to show that, over the course of the programme, students will have encountered all six global contexts multiple times within each subject group? A. No</p> <p>Q. Does the school’s collection of subject-group overviews have to document that all six global contexts are used in each subject group over the course of the programme (vertical mapping of the global contexts)? A. No. In all these cases, the requirement is that, over the course of the entire programme as it is implemented in the school, the written curriculum should include all prescribed key and related concepts and all global contexts.</p>
<p>Q. Where can I find more guidance about key and related concepts? A. Read MYP: FPIP pages 14-16, 56-58. Read also your subject guide under the chapter on “Teaching and learning through inquiry” and your subject teacher support material under “Written curriculum.”</p>	<p>Q. Where can I find more guidance about global contexts? A. Read MYP: FPIP pages 17-19, 58-62. Read also your subject guide under the chapter on “Teaching and learning through inquiry” and your subject teacher support material under “Written curriculum.”</p>	

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Statement of inquiry		
<p>Q. What is a statement of inquiry? A. This statement expresses the relationship between concepts and context; it represents a transferable idea supported by factual content. The statement of inquiry: represents a contextualized, conceptual understanding, describes a complex relationship that is worthy of inquiry, explains clearly what students should understand and why that understanding is meaningful, can be qualified (using phrases such as “often”, “may” and “can”) if it is not true in all situations, but is still an important idea and can be formulated at different levels of specificity. (FPIP, page 62)</p> <p>Q. How do you write a statement of inquiry? A. Teachers construct the statement of inquiry for a unit by combining a key concept, one or more related concepts, and a global context for the unit into a meaningful statement that students can understand. (FPIP, page 62) Teachers can make very broad statements more specific, age-appropriate and focused by asking themselves “Why/how does this relationship or principle occur?” and “What are the implications of this understanding?” However, statements of inquiry should not be so specific that they cannot be transferable beyond the content of the unit. (FPIP, page 63)</p> <p>Q. Why is statement of inquiry important? A. Statements of inquiry facilitate synergistic thinking, synthesizing factual and conceptual levels of mental processing and creating a greater impact on cognitive development than either level of thinking by itself (Erickson 2007; Marzano 2009). (FPIP, page 62)</p> <p>Q. Where can I find more guidance on statement of inquiry? A. Read your subject guide under the chapter on “Teaching and learning through inquiry” and your subject teacher support material under “Written curriculum.”</p>		
Inquiry questions (Factual, Conceptual, Debatable)		
<p>Q. What are inquiry questions? Why are these important? A. Inquiry questions are drawn from, and inspired by, the statement of inquiry. Inquiry questions give shape and scope to a unit of study, and they help to scaffold the objectives that students should strive to achieve. Teachers and students develop these questions to explore the statement of inquiry in greater detail. (FPIP, page 63)</p>		
<p>Q. What is a factual question? A. It is a question that is knowledge/fact-based, is content-driven, is skills-related, is supported by evidence, can be used to explore terminology in the statement of inquiry, is frequently topical, and encourage recall and comprehension.</p>	<p>Q. What is a conceptual question? A. It is a question that enable exploration of big ideas that connect facts and topics, highlight opportunities to compare and contrast, explore contradictions, lead to deeper disciplinary and interdisciplinary understanding, promote transfer to familiar or less familiar situations, issues, ideas and contexts and encourage analysis and application.</p>	<p>Q. What is a debatable question? A. It is a question that enable the use of facts and concepts to debate a position, promote discussion, explore significant ideas and issues from multiple perspectives, can be contested, have tension, may be deliberately provocative and encourage synthesis and evaluation.</p>
<p>Q. Where can I find more guidance on inquiry questions? A. Read your subject guide under the chapter on “Teaching and learning through inquiry” and your subject teacher support material under “Written curriculum.”</p>		
Objectives		
<p>Q. What are MYP objectives? A. The objectives of any MYP subject group state the specific targets that are set for learning in that subject group. They define what the student will be able to accomplish as a result of studying the subject. The objectives of each subject group represent the use of knowledge, understanding and skills that must be taught. They encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation. (FPIP, page 64)</p> <p>Q. Where can I find the MYP objectives? A. Each subject group guide states the prescribed objectives for year 1, 3 and 5. Each subject group has 4 objectives.</p> <p>Q. What is included in this section? A. Choose the appropriate subject objective(s) and the strand specific to the unit.</p>		
Summative assessment		
<p>Q. What is a summative assessment task? A. It is the culminating assessment for a unit, term or course of study, designed to provide information on the student’s achievement level against specific objectives (FPIP Glossary, page 115). Summative assessments are designed to provide evidence for evaluating student achievement using required MYP subject-group-specific assessment criteria (FPIP, page 79).</p> <p>Q. What are assessment criteria? A. MYP assessment requires teachers to assess the prescribed subject-group objectives using the assessment criteria for each subject group in each of the programme (FPIP, page 64). Assessment criteria for years 1,3 and 5 of the programme are provided in the MYP, and their use is mandatory (FPIP, page 80). Criteria against which a student’s performance is measured as evidenced by work produced. Subject-group guides provide assessment criteria to be used for final assessment for each subject group and for the personal project. (FPIP Glossary, page 111)</p>		<p>Q. What should I write in this section? A. Summative assessment tasks should be directly linked to the statement of inquiry and provide varied opportunities for students to demonstrate their knowledge, understanding and skills (FPIP, page 64). Describe/ Explain the relationship between summative assessment task(s) and statement of inquiry.</p>

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Adopted questions and answers from "Further guidance for developing MYP assessed curriculum", pg. 3)

Q. Do I have to use all four criteria for my subject group in each year of the programme? **A.** Yes.

Q. Do I have to use every strand of the MYP assessment objective every time I develop a classroom assessment? **A.** No.

Q. Do I have to make a certain number of assessments of each criterion in my subject group over the course of a reporting period or academic year? **A.** Yes, final grades in each MYP year must be based on at least two judgments against each criterion.

Q. Do I have to make a certain number of assessments of each strand of every criterion in my subject group in the course of a reporting period or academic year? **A.** Yes, all strands must be assessed at least twice in the course of an academic year

Q. Where can I find more guidance on summative questions? **A.** Read your subject guide under the chapter on "Teaching and learning through inquiry" and your subject teacher support material under "Written curriculum."

Approaches to learning (ATL)

Q. What are approaches to learning? **A.** Concerned with the development of thinking skills, strategies and attitudes and the ability to reflect on one's learning (FPIP Glossary, page 111). There are five ATL skill categories in the IB and MYP has expanded it to 10 ATL skills clusters under an appropriate skill category.

Q. Why are these important? **A.** The focus of ATL in the MYP is on helping students to develop the self-knowledge and skills they need to enjoy a lifetime of learning. ATL skills help students prepare for, and demonstrate learning through, meaningful assessment. They provide a common language that students and teachers can use to reflect on, and articulate on, the process of learning. They provide a solid foundation for learning independently and with others (FPIP, page 20). ATL skills can be powerful tools for exploring significant content. This dual focus on content and process promotes student engagement, deep understanding, transfer of skills and academic success.

Q. What is included in this section? **A.** Every MYP unit identifies ATL skills that students will develop through their inquiry and demonstrate in the unit's formative (if applicable) and summative assessments. Many ATL skills directly support the attainment of the subject- group objectives (FPIP, page 64). Teachers identify ATL skills- general as well as subject specific- that students will need to develop, through their engagement with the unit's learning experiences (including formative assessments), to meet the unit's objectives. The skills that the teachers identify in this section of the planner are used to develop horizontal and vertical planning of ATL to meet MYP requirements for the written curriculum (FPIP, page 65).

Adopted questions and answers from "Further guidance for developing ATL in the MYP", pg. 8)

Q. Should I give students ATL grades? **A.** No.

Q. Is it good practice to provide students feedback about ATL skills development? **A.** Students learn best in a trusting environment in which they receive detailed, ongoing feedback about what they are doing well and what they need to practise in order to improve. Meaningful formative feedback can bring about lasting change. The long-term purpose of ATL in the MYP is to help students grow in their ability to monitor their own learning and manage themselves (alone and in a community of practice).

Q. Is it necessary to plan for teaching, assessing and reporting on all five IB ATL skill categories? **A.** No, but these categories can provide a useful organizing tool for managing the horizontal and vertical articulation of ATL skills (especially for schools offering another IB programme).

Q. Is it necessary to plan for teaching, assessing and reporting on all 10 MYP ATL skill clusters? **A.** No.

Q. Is it necessary to plan for teaching, assessing and reporting on all 140 skills listed in the MYP ATL framework? **A.** No.

Q. Can we still use the detailed student learning expectations (SLE)—and previous work on the vertical and horizontal articulation of organization, collaboration, communication, information literacy, reflection, thinking and transfer that we developed as part of our previous work to support ATL as one of the former areas of interaction? **A.** Yes; many SLEs track very clearly into the new skills framework. The introduction of MYP ATL skill clusters offers a good opportunity to reflect on, and update, existing documents, plans, activities and curriculum review processes.

Q. Is horizontal articulation of ATL skills required? **A.** Yes, but schools are only required to demonstrate that teachers have time to work on this important aspect of curriculum planning. Robust horizontal articulation (year-level planning across subject groups) will include discussion about ATL skills that cross-disciplinary boundaries. The results of these discussions do not have to be documented in order to meet requirements for MYP authorization and evaluation.

Q. Do we have to provide documentary evidence of horizontal articulation of ATL skills? **A.** No, but at evaluation and authorization schools must be able to identify resources for and commitment to collaborative planning that includes opportunities for both horizontal and vertical articulation of the curriculum.

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Action: Teaching and learning through inquiry

Content	
<p>Content Objectives</p> <p>Q. What are the content objectives? A. Statements that students are expected to demonstrate or do which are related to subject matter content. This should be SPECIFIC (clear outcome), MEASURABLE (an observable behavior), and ACHIEVABLE (realistic).</p> <p>Q. How do I know the content objectives for the unit? A. The Junior High School curriculum is based on Japan's Ministry of Education (MEXT) requirements. Thus, the topics and content objectives are taken from resources provided by MEXT. For other subjects, the content should be designed to prepare students for the Diploma programme courses. Note: "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." (FPIP, page 66).</p> <p>Q. What are some examples of content objectives? A. The examples below are from MYP Teacher Support Materials. - Draw the field lines around a bar magnet, label the north and south poles and show the direction that a "free-moving north pole" would move in. (Science) - Design and create a Greek chorus mask using cardboard and masking tape that can be used in performance. (Arts) - Examine how human innovations have had a lasting impact on society. (Individuals and Societies) - Analyse the impact of the historical context of Star Wars (special effects, target audience and the merchandising and marketing). (Language and Literature)</p>	
<p>Language Objectives</p> <p>Q. What are the language objectives? A. Language objectives are statements describing language, which will be targeted in the unit. The aim of having these objectives is to facilitate students' acquisition of English within the context of the unit. These objectives should have a clear and natural connection to the unit; they should not be thematically disconnected from the unit content.</p> <p>Q. What is included in this section? A. Language objectives can be related to:</p> <ul style="list-style-type: none"> • communicative functions (such as giving advice, making predictions, describing cause and effect, and so on) • grammar (such as use of verbs, plurals, gerunds, etc.) • sentence structure (such as using coordinating conjunctions, writing complex sentences, using transition signals, and so on) • general writing skills (such as paraphrasing, integrating quotations, writing an outline, etc.) 	<p>Vocabulary</p> <p>Q. What is included in this section? A. Vocabulary is specific words, which will be targeted in the unit or knowledge about vocabulary in English and learning strategies. Vocabulary includes:</p> <ul style="list-style-type: none"> • academic terms which arise in the unit or which need to be reinforced (these can be command terms, subject-specific terms, etc.) • other relevant words you want to focus on in the unit (these can be words that come up in readings, words you have designed activities for, or anything else that you feel is important to success in the unit) • word knowledge and strategies for learning vocabulary (this includes knowledge of prefixes and suffixes, Latin and Greek roots, productive affixes, etc.)
Learning process	
<p>Learning experiences and teaching strategies</p> <p>Q. What is included in this section? A. Teachers should purposefully choose (and write) the 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. (FPIP, page 67).</p> <p>A. 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; and open-ended and involves teaching problem-solving skills (FPIP, page 67).</p> <p>A. 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 (FPIP, page 67).</p>	
<p>Formative assessment</p> <p>Q. What is formative assessment? A. Ongoing assessment aimed at providing information to guide teaching and improve student performance (FPIP Glossary, page 112). 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. (FPIP, page 67).</p> <p>Q. Why is formative assessment important? A. Formative assessment (assessment for learning) provides teachers and students with insights into the ongoing development of knowledge,</p>	<p>Differentiation and Language Support</p> <p>Q. What is differentiation? A. Planning for different levels of ability (FPIP Glossary, page 112). 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.</p> <p>Q. How is differentiation addressed? A. 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) (FPIP, page 68).</p>

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<p>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 (FPIP, page 67).</p>	<p>Q. What should be included in Language Support? A. This should include teaching immersion strategies and/or activities that will assist the students’ language development.</p> <p>Q. Where can I find more guidance on differentiation? A. 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. 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 (FPIP, page 68).</p>
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Resources

<p>Q. What is included in this section? A. List the resources for the unit. Teachers need to investigate available resources and consider what additional resources might be necessary for the unit. Important resources to consider include:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • school, university and community libraries • digital resources, including the internet.
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Reflection: Considering the planning, process and impact of the inquiry

Q. What is the importance of reflection?
A. The “Reflection” section of the MYP unit planner provides teachers with an invitation to record their reflection at three important periods in the unit’s development and implementation. Reflection in the unit planner can provide a starting point for collaborative planning, an ongoing reminder for reflective practice throughout the teaching process, and a format in which to evaluate teaching strategies and learning outcomes. Reflection involves individual and collaborative consideration of the unit’s planning, process and impact. Reviewing each of the required elements of MYP unit planning is a valuable strategy for reflection. Teachers can profitably reflect prior to teaching the unit, during teaching and after the unit has been taught. Including students in reflection on the unit is an important strategy to promote the student-centred approach to education valued in IB programmes (FPIP, page 70).

Below are some questions that can inspire reflection that leads to effective teaching and learning.

Prior to teaching the unit	During teaching	After teaching the unit
<ul style="list-style-type: none"> • Why do we think that the unit or the selection of topics will be interesting? • What do students already know, and what can they do? • What have students encountered in this discipline before? • What does experience tell us about what to expect in this unit? • What attributes of the learner profile does this unit offer students opportunities to develop? • What potential interdisciplinary connections can we identify? • What do we know about students’ preferences and patterns of interaction? • Are there any possible opportunities for meaningful service learning? • What in the unit might be inspiring for community or personal projects? • Could we develop authentic opportunities for service learning? • How can we use students’ multilingualism as a resource for learning? <p>(FPIP, page 70)</p>	<ul style="list-style-type: none"> • What difficulties did we encounter while completing the unit or the summative assessment task(s)? • What resources are proving useful, and what other resources do we need? • What student inquiries are emerging? • What can we adjust or change? • What skills need more practice? • What is the level of student engagement? • How can we scaffold learning for students who need more guidance? • What is happening in the world right now with which we could connect teaching and learning in this unit? • How well are the learning experiences aligned with the unit’s objectives? • What opportunities are we giving to help students explore the interpretative nature of knowledge, including personal biases that might be retained, revised or rejected? (DP theory of knowledge skills development) <p>(FPIP, page 70)</p>	<ul style="list-style-type: none"> • What were the learning outcomes of this unit? • How well did the summative assessment task serve to distinguish achievement levels? • Was the task sufficiently complex to allow students to reach the highest levels? • What evidence of learning can we identify? • What artifacts of learning should we document? • Which teaching strategies were effective? Why? • What was surprising? • What student-initiated action did we notice? • What will we do differently next time? • How will we build on our experience to plan the next unit? • How effectively did we differentiate learning in this unit? • What can students carry forward from this unit to the next year/level of study? • Which subject groups could we work with next time? • What did we learn from standardizing the assessment? <p>(FPIP, page 70)</p>