



Designing for Depth:

Building a Coherent and Cumulative MYP Curriculum

Table of Contents

Why Curriculum is Important 2

Conceptual Coherence: Designing for Deep Understanding 6

Knowledge Architecture: Designing for Cumulative Understanding 12

Assessment as Evidence of Disciplinary Learning 17

Inquiry and Explicit Instruction 23

Approaches to Learning: Teaching Skills Deliberately 26

Global Context: Connecting Learning to the World 30

Sustaining Curriculum Coherence 34

Conclusion: Curriculum as Deliberate Design 37

Further Reading 38

Why Curriculum is Important

Curriculum as Intellectual Architecture

Curriculum shapes what students have the opportunity to learn. It determines which knowledge is selected, how ideas are organised and the kinds of thinking students are expected to develop over time. Strong teaching can bring a curriculum to life, but it cannot fully compensate for one that is fragmented, poorly sequenced or unclear about its educational purpose.

Curriculum is sometimes treated as the documentation surrounding teaching: schemes of work, curriculum maps, unit planners and lists of content. These documents can make decisions visible, but they are not the curriculum itself. The curriculum lies in the decisions behind them: what students should learn, why it matters, when they should encounter it and how their understanding should develop.

The quality of those decisions influences:

- what knowledge students encounter and revisit;
- how learning connects within units and across years;
- whether students develop increasingly sophisticated disciplinary understanding;
- whether teaching and assessment reflect the same intended learning;
- whether later learning builds on secure foundations or exposes unresolved gaps.

In the MYP, curriculum design brings together disciplinary knowledge, conceptual understanding, approaches to learning, global contexts and assessment. Placing these elements on the same planner does not make them coherent. Coherence depends on the relationships between them and on whether each element contributes to a clear educational purpose.

Curriculum is therefore not simply a list of what will be taught. It is the intellectual architecture through which learning is selected, structured and developed over time. The first challenge is to distinguish that work from the simpler task of covering content.

Beyond Coverage

Coverage provides a record of what has been taught, but it does not show what students have understood, retained or become able to use. A class may complete every planned topic and still leave with fragmented knowledge, unresolved misconceptions and little sense of how the ideas connect.

Curriculum design therefore asks more than whether students have encountered particular content. It considers how knowledge should be organised so that new learning can connect with what students already know. This matters because students cannot process unlimited amounts of unfamiliar information at once. Secure prior knowledge reduces that demand, whilst gaps in understanding make new material harder to interpret.

Structural thinking asks:

- What knowledge is foundational, and what depends on it?
- What must students understand before they can engage with greater abstraction?
- Which misconceptions are likely to interfere with later learning?
- Which ideas need to be revisited, and at what points?
- What should students still understand and be able to use after the unit has ended?

Poor sequencing introduces complexity before students have the knowledge needed to make sense of it. It may assume learning that has not been secured, move on before misconceptions have been addressed or prioritise novelty over consolidation.

A well-sequenced curriculum builds from strong foundations, revisits important ideas deliberately and increases complexity gradually. This requires teachers to make careful choices about what is essential, what can be omitted and where time should be given to consolidation. It also requires departments to look beyond individual units so that later learning genuinely builds on what came before.

The Unit as a Designed Experience

An MYP unit is more than a time-bound section of a course. It should organise knowledge, conceptual understanding, disciplinary practice and assessment around a clear educational purpose.

Within a well-designed unit, students:

- build and connect disciplinary knowledge;
- deepen their conceptual understanding;
- learn and practise the methods used within the subject;
- develop relevant approaches to learning;
- demonstrate what they have learned through aligned assessment.

The summative task does not define the purpose of the unit. It provides evidence of whether students have achieved the intended learning.

When assessment is properly aligned, it feels like the natural culmination of what students have been building towards. When there is a sharp difference between what students have practised and what they are asked to demonstrate, that usually points to a weakness in the design of the unit.

Knowledge, Concepts and Disciplinary Practice

Knowledge, concepts and skills are often discussed as though schools must choose between them. In practice, students need all three. They need knowledge to think about, concepts to help them make sense of it, and opportunities to use both through the work of the subject.

Conceptual understanding cannot be built from abstract terminology alone. Students need enough subject knowledge to recognise patterns, explain relationships and apply ideas beyond the example in front of them. Without those connections, knowledge can remain fragmented. Skills can become equally superficial when they are taught as general labels rather than as part of a discipline.

The same skill does not look identical in every subject:

- Critical thinking in history is not the same as critical thinking in mathematics.
- Research in science differs from research in literature.
- Communication in visual arts is structured differently from communication in economics.

Approaches to learning therefore need to be taught through the work students are actually doing. Teachers should make clear what a skill looks like in their subject, model it, give students time to practise it and gradually expect them to use it with greater independence.

Concepts also need to do more than appear on the planner. The central idea should influence the knowledge selected, the questions explored and the thinking required in the assessment.

A simple test is to remove the concept and see what changes. If the content, learning experiences and assessment remain exactly the same, the concept was not really shaping the unit.

The Professional Responsibility of Curriculum Design

Curriculum design draws on subject expertise, pedagogical knowledge, an understanding of how learning develops and awareness of how expectations

should increase across years. It also requires teachers to reflect honestly on whether the curriculum is doing what it was intended to do.

When curriculum work is reduced to compliance, professional judgement is easily displaced by template completion. Teachers become responsible for filling in documents rather than making and defending decisions about sequencing, assessment and progression.

A strong curriculum culture treats this work as a shared intellectual responsibility. Departments need time to debate sequencing, refine assessment tasks, test the clarity of intended conceptual understanding and examine what student work reveals about the curriculum itself. Improvement is therefore ongoing, with plans revised in response to evidence rather than treated as finished once they have been uploaded.

The rest of this Guide examines the decisions that make curriculum coherence possible: what to prioritise, how to sequence learning, how to connect knowledge and concepts, and how to align assessment with what students have been taught. The aim is not to prescribe a single model, but to support more careful curriculum thinking within the MYP.

Conceptual Coherence: Designing for Deep Understanding

Concepts help students organise knowledge, recognise relationships and make sense of ideas that might otherwise remain disconnected. Their usefulness, however, depends on the precision of the curriculum design behind them. Naming a concept does not establish what students should understand about it or how that understanding will develop during the unit.

The central task is therefore to define the conceptual understanding clearly and then select the knowledge, questions, learning experiences and assessment needed to build it.

From Concept to Conceptual Understanding

A concept is a broad, abstract idea that helps students organise and interpret knowledge. Change, perspective, systems, identity and structure are all concepts. Each can provide a useful lens, but none gives a unit a clear intellectual purpose on its own.

Conceptual understanding is more specific. It describes a relationship or principle that students should come to understand through studying particular content.

For example:

- Change is a concept. Students might come to understand that the causes, pace and consequences of change vary according to the conditions within a system.
- Perspective is a concept. Students might come to understand that interpretations are shaped by context, experience and access to evidence.
- Structure is a concept. Students might come to understand that the arrangement of parts affects how something functions.

The distinction is useful when planning:

- The topic identifies what students will study.
- The concept provides a lens through which they will examine it.
- The conceptual understanding states what they should come to understand.

A theme or project title does not necessarily provide that understanding. Terms such as conflict, sustainability or the future may identify an area of interest, but they do not yet express the relationship students are expected to

explain. Teachers need to move beyond naming the broad idea and decide what, specifically, students should understand about it.

Connecting Concepts and Knowledge

Conceptual understanding depends on secure disciplinary knowledge. Students cannot reason meaningfully about causality without knowing the events, conditions and evidence involved. They cannot analyse interdependence without understanding the parts of a system and the relationships between them.

Concepts help students organise and interpret knowledge, but they do not replace it. When students know too little about the subject, conceptual discussion often becomes vague. They may use words such as change, identity or perspective without being able to explain what changed, whose identity is being considered or what shaped a particular interpretation.

When planning, teachers need to consider:

- What knowledge will students need to understand the intended relationship?
- Which examples will make that relationship visible?
- What vocabulary will students need to discuss it accurately?
- Which misconceptions are likely to interfere with understanding?
- What further knowledge will be needed before students can apply the idea elsewhere?

The meaning of a concept also depends on the discipline. Perspective in history involves evidence, context and interpretation. In visual arts, it may involve viewpoint, representation and the relationship between the artist and the audience. The same word can therefore lead students towards different kinds of thinking.

Conceptual planning should preserve these disciplinary differences. A definition broad enough to fit every subject may be easy to reuse, but it is unlikely to help students think with much precision.

Building the Conceptual Frame of a Unit

A concept-driven unit needs a clear conceptual focus. This should express what students are expected to understand, not simply identify a broad concept and a topic.

Compare:

Systems influence change in communities.

with:

Changes in one part of a social system can have intended and unintended consequences elsewhere.

The first statement is broad and says very little. The second identifies a relationship that students can investigate through particular examples, question as their knowledge develops and apply when examining other systems.

Once the intended conceptual understanding is clear, teachers can examine whether the rest of the unit supports it:

- Does the selected knowledge give students enough substance to understand the relationship?
- Does the chosen context make the relationship meaningful without distorting the disciplinary learning?
- Do the questions lead students towards the intended understanding?
- Will students return to the central idea as their knowledge develops?
- Does the assessment require them to use that understanding?

Questions serve different purposes within this process. Some establish the knowledge students will need. Others draw attention to patterns, relationships or principles. Others invite students to examine a claim using evidence and disciplinary reasoning.

They need to work together. A collection of individually interesting questions will not create coherence if each one takes the unit in a different direction.

Teaching for Conceptual Understanding

Conceptual understanding develops through the subject matter students are studying. It is not created by displaying a conceptual term, referring to it occasionally or asking students to repeat the intended understanding at the end of the unit.

Students need to encounter the central relationship in several examples and to examine how it operates. Teachers can support this by:

- beginning with examples that students can understand before moving towards abstraction;
- comparing cases that share important features;
- using contrasts and non-examples to clarify the limits of an idea;
- modelling how subject knowledge supports a conceptual explanation;
- returning to the conceptual focus as students learn more;
- asking students to revise earlier explanations in light of new knowledge or evidence.

In a unit concerned with systems, for example, students might first identify the parts and interactions within a familiar system. They could then compare it with another, examine what both have in common and consider where the comparison no longer holds. Later examples might introduce feedback, instability or unintended consequences.

Through this process, students develop a more precise understanding of what makes something a system and how changes within it can produce wider effects. They are not simply being told that several examples belong to the same category.

The language students use should also become more precise. Saying that something caused change, reflects identity or presents a different perspective is not enough. Students should be expected to explain the mechanism, identify the relationship and support their interpretation with relevant knowledge.

Questions that help develop this precision include:

- What relationship can you see between these examples?
- Which features are essential, and which belong only to this case?
- Under what conditions might the relationship change?
- Where does this explanation become less useful?
- What more would you need to know before applying the idea elsewhere?

The aim is for students to understand the conceptual relationship well enough to explain it, question it and use it, rather than simply recognise the language attached to it.

Assessing Conceptual Understanding

Assessment should show whether students can use the understanding developed through the unit. Repeating a conceptual term, paraphrasing the central idea or recognising it in a familiar example is not enough.

Depending on the subject, students might be asked to:

- explain a relationship using relevant knowledge and evidence;
- compare how the same idea operates in different cases;
- apply an established understanding to a new but accessible example;
- consider the conditions under which an explanation holds;
- justify an interpretation using the methods of the discipline.

A different context can be useful, but novelty needs to be handled carefully. When students lack the knowledge needed to understand the new material, the task may end up measuring background knowledge, reading ability or confidence rather than conceptual understanding.

The context should therefore be unfamiliar enough to require thought, but accessible enough for students to engage with the intended idea. The type of reasoning demanded should also be familiar. Students should have seen it modelled, practised it and received feedback before being expected to demonstrate it independently.

Good assessment makes the conceptual purpose of the unit visible. It shows whether students can explain the relationship accurately, support their thinking and recognise where the idea may need to be refined.

Conceptual Progression Across Years

Conceptual progression is not achieved simply by revisiting the same concepts in different year groups. Students need to meet them in increasingly demanding ways, supported by richer knowledge and more sophisticated disciplinary thinking.

Early in the programme, students may recognise and describe a relationship. Later, they may be expected to explain how it operates, compare it across cases, analyse the conditions that shape it or evaluate the limits of a particular interpretation.

Departments should consider:

- where important concepts first appear;
- how their meaning is introduced within the subject;
- what knowledge allows students to understand them more deeply;
- how the reasoning expected becomes more demanding;

- where concepts are deliberately revisited;
- what greater independence should look like over time.

The same concept may also carry a different meaning across subjects. Systems in science, societies and mathematics may share some features, but the knowledge and methods used to examine them are not interchangeable. Cross-subject connections are useful when those differences are made clear rather than assumed away.

Vertical planning should therefore show more than where a concept appears. It should show how students' understanding of it is expected to deepen.

Signs of Superficial Conceptual Design

Conceptual planning is likely to be superficial when:

- the concept could be changed without affecting the content, teaching or assessment;
- the conceptual focus is so broad that almost any topic could fit it;
- students can use the terminology but cannot explain the idea clearly;
- the concept is introduced at the start of the unit and then largely disappears;
- lessons cover the topic without returning to the relationship students are meant to understand;
- assessment rewards accurate recall but places little demand on conceptual reasoning;
- the same concept reappears across year groups without any clear increase in depth or complexity.

These weaknesses usually indicate that the concept has been added to the unit rather than used to shape it. Conceptual coherence comes from deciding precisely what students should understand and ensuring that the knowledge, teaching, inquiry and assessment all contribute to that understanding.

Knowledge Architecture: Designing for Cumulative Understanding

A curriculum can list everything students will study and still give very little sense of how their learning is meant to build. Knowledge architecture is about the thinking behind that list: what students need to understand first, which ideas later learning depends on and where important knowledge needs to be revisited.

Students don't retain everything simply because it has been taught. Some ideas are only partly understood, some are forgotten and some misconceptions remain hidden until a later topic exposes them. Curriculum planning needs to anticipate this rather than assuming that each completed unit has left a secure foundation behind.

From Content Lists to Knowledge Architecture

A content list is useful because it shows what will be taught, but it does not show how the different parts of the curriculum relate to one another. It cannot tell us whether students are being prepared for later learning, whether important ideas are given enough time or whether the same material is being repeated without becoming more demanding.

When teachers plan how knowledge will build, they need to ask:

- Which knowledge will students rely on later?
- What needs to be understood before they can move on to more complex ideas?
- Which misconceptions are likely to cause problems?
- Where should important knowledge be revisited?
- How will we know whether students have retained it?

The answers will look different in each subject. In science, an explanation of chemical reactions may rely on earlier understanding of particles, conservation and substances. In mathematics, algebraic reasoning may draw on students' knowledge of equivalence, number relationships and proportion. In history, students need enough knowledge of chronology, context and evidence before they can judge between competing interpretations.

These relationships aren't always obvious from a list of topics. Departments need to make them visible so that foundational knowledge is given enough attention and later units genuinely build on what students have already learned.

Selecting What Matters

No curriculum has room for everything, so choosing what to include is part of the work. The question isn't simply whether a topic is interesting or whether it has traditionally been taught. We need to think about what that knowledge allows students to understand, what later learning depends on it and whether it gives them access to the subject in a meaningful way.

Some knowledge is foundational because students will use it again and again. Some matters because it helps them make sense of a major idea within the discipline. Other content may be worthwhile because it broadens their understanding, introduces an important perspective or gives them something significant to think about, even if it doesn't lead directly into the next unit.

Teachers might ask:

- What will students struggle to understand later if this is missing?
- Which ideas do they need in order to reason well within the subject?
- What knowledge gives them access to important disciplinary questions or conversations?
- Is this content worth the time it will take to teach and revisit properly?
- Are we including it because it matters, or simply because it has always been there?

These decisions rely on professional judgement. They can't be settled by a template or reduced to a list of "core" and "optional" content. Departments need to discuss what deserves emphasis, where depth matters more than breadth and what can reasonably be left out.

Trying to fit in too much often means that important ideas are introduced briefly and then abandoned. A more focused curriculum gives students time to understand, connect and retain what matters, rather than moving quickly through material that they're unlikely to use again.

Sequencing and Cognitive Load

Good sequencing isn't just a matter of putting topics into a sensible order. It depends on understanding what students need to know before a new idea will make sense, and where the curriculum might be asking too much of them at once.

Some knowledge acts as a foundation for what comes later. If it's insecure, students may still complete the work, but they're more likely to rely on memorised procedures, guesswork or surface features. The problem often doesn't become obvious until the subject becomes more demanding.

When departments review a sequence, they need to consider:

- What prior knowledge does this new material rely on?
- Has that knowledge been taught recently enough, and has it been retained?
- Are we introducing too many unfamiliar ideas at the same time?
- Which misconceptions are likely to interfere with the new learning?
- Where should complexity increase, and where is more consolidation needed?

Working memory is limited, so poor sequencing can make a topic harder than it needs to be. Students may be trying to understand a new concept whilst also recalling unfamiliar vocabulary, interpreting a new representation and using a method they haven't yet secured. None of those demands may be unreasonable on its own, but together they can overwhelm the thinking the task was meant to develop.

This doesn't mean that every sequence should move neatly from simple to difficult. Learning is rarely that tidy, and students sometimes need to encounter a challenging idea before they can fully appreciate the knowledge that supports it. The important thing is that the difficulty is deliberate rather than accidental.

A well-sequenced curriculum gives students enough support to engage with complexity, then gradually asks them to manage more of it independently. It also leaves room to pause, revisit and adjust when the assumed foundation isn't as secure as the plan suggested.

Taught Doesn't Mean Secured

One of the easiest mistakes in curriculum planning is to assume that students know something because it appeared in an earlier unit. Teaching gives students the opportunity to learn, but it doesn't guarantee that the knowledge was understood accurately or retained.

Students often leave a unit with an uneven grasp of what was taught. They may remember the vocabulary but not the idea behind it, recognise a familiar example but struggle to explain it, or use a method successfully without understanding why it works. These gaps can remain hidden until later work depends on that knowledge.

Departments therefore need to distinguish between what has been taught, what students appeared to understand at the time and what they can still use later. Useful questions include:

- Which knowledge from earlier units does this work depend on?
- What evidence do we have that students still understand it?

- Which parts are most likely to have been forgotten or misunderstood?
- How will we revisit them without simply repeating the original lesson?
- What should we adjust if the expected foundation isn't there?

Revisiting knowledge isn't a sign that the curriculum has failed. Forgetting is normal, and some ideas only become fully meaningful once students meet them again in a more demanding context. The important thing is that these returns are planned and purposeful rather than left until a gap causes a problem.

When earlier learning is treated as permanently secured, students can end up carrying gaps into increasingly complex work. They may need to manage the new material whilst also reconstructing the foundations it assumes. A cumulative curriculum makes room to check, retrieve and strengthen those foundations before asking students to build further on them.

Planning for Retrieval and Revisit

Important knowledge needs to be encountered more than once. Without planned opportunities to retrieve and use it, even well-taught material is likely to fade.

Retrieval practice asks students to bring knowledge back to mind rather than simply rereading or reviewing it. Spacing allows time to pass before that knowledge is revisited. Interleaving mixes material so students have to decide which idea or method applies, rather than following a repeated pattern.

These approaches serve different purposes, so they shouldn't be added mechanically. Departments need to consider:

- Which knowledge students will need again later
- When it should be revisited
- Whether students need simple recall, explanation or application
- Which ideas are useful to compare or practise together
- How retrieval will become more demanding over time

A first return might check whether students can recall an idea accurately. Later, they might explain it, connect it with newer learning or use it in a less familiar situation. Revisiting should deepen understanding rather than reproduce the same questions each time.

This planning needs to be visible across the curriculum. If retrieval depends entirely on individual teachers remembering to include it, important knowledge may disappear for months or be revisited inconsistently. A

curriculum map should show where earlier learning will be brought back and what students will be expected to do with it.

Coherence Within and Across Years

Knowledge needs to build within units, between units and across year groups. Without that wider view, students may repeat familiar material without going any deeper, or meet new work that assumes knowledge they were never given enough time to secure.

Departments need to look beyond individual unit plans and ask:

- What does this unit prepare students for?
- Which earlier knowledge does it draw on?
- Where will important ideas return?
- How will expectations become more demanding?
- Are there unnecessary repetitions or gaps?
- What should students be able to do more independently each year?

Revisiting isn't the same as repeating. Students might first learn to describe an idea, later use it to explain a relationship and eventually apply it in a more complex context. The content may be familiar, but the thinking should develop.

This kind of coherence depends on collaboration. Individual teachers can plan strong units, but only departments can see whether knowledge is accumulating across the programme. A useful curriculum map should make those connections visible without becoming so detailed that it turns into another compliance document.

Knowledge architecture is the work of deciding what students need to know, how that knowledge will build and where it needs to return. It doesn't assume that teaching has produced secure learning; it checks what students can still understand and use, then plans accordingly. When these decisions are made across units and years, later learning rests on firmer foundations and students are better prepared for increasing complexity.

Assessment as Evidence of Disciplinary Learning

What students are asked to demonstrate tells them a great deal about what the curriculum values. A school may talk about conceptual understanding, inquiry and careful reasoning, but students will pay close attention to what actually earns credit.

Assessment therefore needs to be considered as part of curriculum design, rather than added once the unit has been planned. It should give students a fair opportunity to show the knowledge, understanding and disciplinary practices they've developed. It doesn't need to capture everything taught in the unit, but it should provide useful evidence of the learning it was designed to assess.

Assessment Makes Curriculum Priorities Visible

Assessment influences what students pay attention to. They notice what earns credit, what teachers emphasise in feedback and which parts of their learning they're expected to explain or justify.

A task that asks students to use evidence, explain relationships and reach a reasoned conclusion places different demands on them from one that can be completed through recall or polished presentation. Recall may be entirely appropriate when the purpose is to check foundational knowledge, and presentation may matter within particular subjects. The problem comes when success depends on something other than the learning the task was meant to assess.

When planning assessment, teachers need to ask:

- What are students expected to demonstrate?
- What would a strong response reveal about their learning?
- Could students succeed without the knowledge or understanding developed through the unit?
- Does any part of the task add difficulty that isn't relevant to its purpose?
- Will the evidence produced allow teachers to make a sound judgement?

These questions help keep the assessment focused on what matters, rather than on task completion alone.

Assessing Knowledge, Understanding and Practice

Assessment should give students a genuine opportunity to show what they understand and what they can do within the subject. That means designing tasks around the intended learning, rather than choosing an activity first and then trying to attach objectives or criteria afterwards.

The relevant subject-group objectives and assessment criteria help define the kinds of knowledge, understanding and practice that matter within the discipline. They shouldn't be treated as separate boxes to be covered. A strong task may ask students to draw on several aspects of their learning at once, but the purpose of each assessed element still needs to be clear.

Teachers should consider:

- What knowledge and understanding does the task require?
- Which disciplinary practices will students need to use?
- Does the task give them enough scope to demonstrate different levels of achievement?
- Are students being judged on anything that isn't relevant to the intended learning?
- Is the evidence produced sufficient for a fair judgement?

The task itself doesn't need to be elaborate. A complex format can sometimes obscure the learning being assessed, whilst a carefully designed question, investigation, performance or written response may reveal far more. What matters is whether the assessment produces clear evidence of the learning the curriculum intended.

Designing Tasks That Reveal the Intended Learning

An assessment task needs to make the intended learning visible. That sounds obvious, but tasks can easily become so elaborate that students spend more time managing the format than demonstrating what they know and understand.

Authenticity can be valuable, but it shouldn't come at the expense of clarity. A presentation, exhibition, campaign or extended project may feel engaging, yet still produce weak evidence if students can succeed through design, confidence or effort without using the disciplinary learning the unit was meant to develop.

Teachers need to consider:

- Does the task require the knowledge and understanding developed in the unit?
- Is the disciplinary thinking visible in the students' response?

- Could an impressive product conceal weak understanding?
- Are any parts of the task adding difficulty without improving the evidence?
- Is the task broad enough for students to demonstrate different levels of achievement?

Trying to assess too many different things through one task can also make expectations unclear. A focused assessment often produces better evidence than an ambitious task overloaded with several competing purposes.

The format should serve the learning being assessed. Sometimes an extended performance is appropriate. At other times, a carefully designed question, investigation, analysis or problem will show far more.

Alignment and Preparation

Assessment is only fair when students have been prepared for the kind of thinking it requires. They shouldn't meet evaluation, synthesis or extended reasoning for the first time in the summative task.

Preparation doesn't mean rehearsing the exact assessment. It means teaching the knowledge, concepts and disciplinary practices students will need, then giving them opportunities to use them in related ways.

Teachers should check:

- Have students learned the knowledge the task depends on?
- Have they practised the type of reasoning they'll need?
- Have expectations for communication been made clear?
- Have they received feedback on similar work?
- Is the level of independence appropriate for this point in the programme?

A demanding task can still feel fair when its intellectual demands are familiar. Students may be working with a new question or context, but they should recognise the kind of thinking expected of them.

When assessment asks for more than students have been taught or allowed to practise, the problem isn't rigour. It's misalignment.

Assessment for Learning

Assessment for learning is the use of evidence during learning to decide what should happen next. It helps teachers understand what students know, where misconceptions remain and whether they're ready to move forward. It should also help students understand their own progress and act on feedback.

Evidence might come from:

- questioning and classroom discussion;
- short retrieval or diagnostic tasks;
- observation of students' work and reasoning;
- brief written explanations;
- self-assessment or peer critique;
- drafts and work produced during the unit.

The method matters less than the quality of the evidence it produces. A correct answer may conceal weak reasoning, whilst an incorrect answer may reveal a specific misconception that can be addressed. Teachers need to be clear about what they're checking and what different responses might mean.

Evidence becomes formative when it leads to action. A teacher might revisit prior knowledge, change an explanation, adjust the pace, provide more practice or increase the level of challenge. Students might redraft work, correct an error, revise an explanation or identify what they need to improve next.

This is where assessment for learning connects with adaptive teaching. The learning goal remains ambitious and shared, whilst teaching and support are adjusted in response to what students show. The adaptive teaching framework explores that responsive cycle in more detail, including how support can be reduced as students become more secure and independent.

Assessment for learning isn't simply frequent checking. Its value lies in whether the evidence leads to a better decision by the teacher, the student or both.

Making Standards Clear

Students need to understand what quality looks like before they're asked to produce it. Giving them assessment criteria isn't always enough, particularly when the language is broad or unfamiliar.

Teachers can make standards clearer by:

- discussing what the criteria mean within the subject;

- examining examples of work at different levels;
- showing how a response becomes more precise, analytical or well supported;
- modelling the thinking behind a strong piece of work;
- giving feedback that refers to the intended learning rather than presentation alone.

Examples are useful when students are asked to analyse them rather than simply copy their surface features. They might compare two responses, identify where the reasoning becomes stronger or explain why one use of evidence is more convincing than another.

Clarity also matters between teachers. Departments need a shared understanding of what the criteria look like in practice, particularly when several teachers assess the same course. Looking at student work together helps teachers test their interpretations, discuss differences in judgement and maintain consistent expectations.

The aim isn't to reduce quality to a checklist. It's to make the standards visible enough that students can make better decisions about their work and teachers can judge it with greater consistency.

Progression Across the Programme

Assessment should become more demanding as students move through the programme, but progression isn't simply a matter of making tasks longer or removing support.

Students should gradually be expected to work with greater independence, handle more complex material and sustain their reasoning for longer. They may also need to make choices about method, select relevant evidence or decide how best to communicate their thinking.

Departments should consider:

- How does the level of reasoning increase across year groups?
- Where are students expected to work with greater independence?
- How do tasks become more complex without becoming unnecessarily complicated?
- Which forms of support should be reduced, and when?
- Are students being prepared for the demands of whatever follows the MYP?

Support shouldn't disappear simply because students are older. It should change as their knowledge and confidence develop. A scaffold that is useful when a process is first introduced may later become restrictive, whilst

removing it too early can turn the task into a test of coping rather than learning.

Progression also needs to be visible across the assessment programme. If students repeatedly complete similar tasks with similar levels of support, they may become efficient at the format without developing greater disciplinary understanding. Assessment should give them increasing responsibility for applying what they know, making decisions and explaining their reasoning.

Assessment works best when it's designed alongside the curriculum rather than added at the end. It should reveal the disciplinary learning students were meant to develop, reflect what they've been taught and practised, and provide evidence that teachers and students can use. Across the programme, the demands should become more complex and independent without introducing difficulty that's unrelated to the learning being assessed.

Inquiry and Explicit Instruction

Inquiry is sometimes treated as though it requires teachers to step back and let students work things out for themselves. That can lead to activities that look open and engaging but leave students unsure about what they're meant to learn or how to make sense of what they find.

Explicit instruction is sometimes presented as the opposite: tightly controlled teaching in which students receive information rather than investigate ideas. In practice, good curriculum design draws on both. Teachers explain and model when students need clarity, then create opportunities for them to question, apply, investigate and make decisions with increasing independence.

The balance won't look the same in every subject, unit or classroom. It depends on what students already know, how difficult the material is and what kind of thinking the curriculum is trying to develop.

What Inquiry Requires

Inquiry gives students opportunities to investigate worthwhile questions, problems, evidence or ideas. It should help them develop knowledge and understanding rather than simply keep them busy or give them freedom of choice.

Students don't need to know everything before they begin, but they do need enough knowledge and guidance to engage with the inquiry productively. Without that foundation, they may struggle to ask useful questions, judge the quality of information or recognise whether their conclusions are reasonable.

When planning inquiry, teachers need to consider:

- What are students being asked to investigate or work out?
- What knowledge will they need before they begin?
- What can they reasonably discover or infer for themselves?
- What evidence, examples or resources will help them?
- Where are misconceptions likely to arise?
- How much guidance will they need to stay focused on the intended learning?

Inquiry can be tightly guided or relatively open. A short investigation of contrasting examples may be just as valuable as an extended student-led project. The amount of choice matters less than whether students are doing meaningful disciplinary thinking and whether the inquiry contributes to what the unit is designed to help them understand.

The Place of Explicit Instruction

Explicit instruction has an important place within inquiry. It helps students build the knowledge and disciplinary tools they'll need before they're expected to use them more independently.

This might involve:

- explaining a new idea clearly;
- modelling how to approach a problem or analyse evidence;
- drawing attention to important features or common misconceptions;
- guiding students through part of a process;
- checking understanding before moving on.

The aim isn't to remove challenge. It's to make the challenge accessible. Students are more likely to take part in meaningful inquiry when they understand the concepts, language and methods they're being asked to use.

The amount of instruction will vary. Some ideas need careful explanation and modelling, whilst others are better explored through examples, discussion or investigation. The decision should depend on what students need in order to engage with the learning well, not on a fixed preference for either teacher-led or student-led activity.

Planning the Movement Between Instruction and Inquiry

The balance between instruction and inquiry should be planned around the learning, not around a fixed teaching style.

Teachers need to decide:

- what students need to be taught directly;
- what they can investigate productively;
- where modelling or guided practice will help;
- when greater choice or independence is appropriate;
- how understanding will be checked before moving on.

An inquiry might begin with a problem or example that exposes students' current thinking, followed by explanation or modelling where needed. At other times, students may need secure knowledge before an investigation will be useful.

The sequence doesn't need to follow a set pattern. What matters is that instruction gives students the knowledge and tools they need, whilst inquiry gives them opportunities to use, test and extend their understanding.

Modelling Disciplinary Thinking and Building Independence

Students often need to see how experts in a subject approach a problem before they can do it well themselves. Modelling can make the hidden parts of thinking visible, whether that's interpreting a source, structuring an argument, analysing data or choosing a mathematical method.

Support can then be reduced as students become more secure. This might involve moving from a worked example to guided practice, then asking students to make more of the decisions themselves.

The shift won't always be linear. Students may need more support when the content becomes harder or the task changes. The aim is to build independence without withdrawing guidance before students are ready.

Access to Inquiry

Inquiry can favour students who already have strong background knowledge, confidence or familiarity with academic expectations. Clear teaching and appropriate support help more students take part meaningfully.

Teachers should consider whether students have:

- the knowledge and vocabulary they'll need;
- clear expectations;
- suitable examples or models;
- access to the resources required;
- enough structure to begin without having every decision made for them.

Support should help students reach the same ambitious learning goal, not replace it with an easier one. As understanding grows, that support can be adjusted or reduced so students take greater responsibility for the inquiry.

Progression Across the Programme

As students move through the programme, inquiry should ask more of them. They might take greater responsibility for framing questions, choosing methods, judging evidence and managing longer pieces of work.

Progression isn't simply about making inquiry more open. It's about increasing the quality of the decisions students are expected to make.

Departments should consider:

- where students are first taught key inquiry processes;
- how guidance will be reduced over time;
- when students will begin making more independent choices;
- how the complexity of evidence and reasoning will increase;
- whether later tasks genuinely build on earlier experience.

Students should become more independent because they've developed the knowledge and disciplinary tools to manage that independence, not because support has simply been removed.

Inquiry and explicit instruction work best when they're planned together. Students need clear teaching when knowledge or disciplinary processes are new, and genuine opportunities to use that learning through questioning, investigation and decision-making. The balance should change as students become more secure, so independence is built rather than simply expected.

Approaches to Learning: Teaching Skills Deliberately

Approaches to Learning are often named in unit plans without being given much attention afterwards. A unit might identify communication, research or thinking skills, but students won't develop them simply because the task requires them.

ATL skills need the same deliberate planning as knowledge and conceptual understanding. Teachers need to decide which skills matter, what they look like in the subject and how students will be taught, supported and given opportunities to improve.

Choosing ATL with Purpose

A unit doesn't need to address every ATL category. It should focus on the skills students genuinely need for the learning and assessment ahead.

Teachers should ask:

- Which parts of the unit are likely to be difficult for students?
- What skills will help them manage that difficulty?
- Which skills need to be taught, rather than simply expected?
- Where will students practise them?
- How will they receive feedback and improve?

A research task, for example, may involve several skills, but trying to teach source evaluation, note-making, referencing, synthesis, organisation and communication at the same time is unlikely to develop any of them particularly well. It's usually better to choose a small number and teach them properly.

The skill should earn its place because it helps students engage more successfully with the subject, not because an ATL box needs to be completed.

Defining Skills Within the Discipline

ATL skills don't look exactly the same in every subject. Research in science involves different decisions from research in history, and communication in mathematics is shaped by different conventions from communication in the arts.

Teachers therefore need to define the skill in relation to the work students are doing. For example, "critical thinking" might involve:

- evaluating the reliability of a source in history;
- testing whether evidence supports a conclusion in science;

- comparing possible methods in mathematics;
- analysing how meaning is created in a text.

There may be shared features across subjects, but students won't always recognise them on their own. They need help to see what can transfer, what changes with the context and which disciplinary conventions still apply.

The more precisely a skill is defined, the easier it is to teach, practise and give useful feedback on it.

Teaching, Practising and Giving Feedback

Once an ATL skill has been chosen and defined, students need to be shown how to use it. This might involve modelling a process, examining examples or breaking a complex skill into manageable parts.

Students then need repeated opportunities to practise it through the subject, rather than in a separate skills lesson with little connection to the curriculum. Practice should become more demanding as they become more secure.

Feedback should address the skill itself. Instead of simply telling students that their research or communication needs improvement, teachers should identify what they did well, where the process broke down and what they should try next.

A skill is unlikely to develop through one task. It needs to be revisited, used in different situations and refined over time.

Metacognition and Self-Regulation

Metacognition involves students planning how they'll approach a task, monitoring whether that approach is working and deciding what to change. It needs to be taught through real subject learning rather than through vague reflection questions at the end of a unit.

Students can be helped to ask:

- What is this task asking me to do?
- Which strategy is most likely to help?
- How will I know whether my approach is working?
- What should I change if I get stuck?
- What will I do differently next time?

Self-regulation develops when students act on these decisions by managing their time, using feedback, seeking help appropriately and adjusting their approach. Teachers can support this through modelling, prompts and structured reflection, then reduce that support as students become more independent.

Reflection is most useful when it leads to a specific decision. Simply asking students how they felt or whether they enjoyed a task is unlikely to improve how they learn.

Progression and Transfer Across the Programme

ATL progression isn't just about removing scaffolds. Students should gradually work with more complex situations, choose strategies more independently and adapt when their first approach doesn't work.

Departments need to consider:

- where a skill is first introduced and modelled;
- where students will practise it again;
- how the level of challenge will increase;
- when students will be expected to choose their own approach;
- how they'll be helped to recognise where the skill can be used elsewhere.

Transfer shouldn't be assumed. A student who can evaluate evidence in science may not automatically use the same habits in history. Teachers need to make the connection explicit, whilst also showing where the demands of each subject differ.

Progression is visible when students don't simply repeat the same process with less support, but use the skill with greater judgement, flexibility and independence.

A Quick Check for Curriculum Planning

Before finalising a unit, teachers should be able to identify:

- which ATL skills have been chosen and why they matter;
- what those skills look like within the subject;
- where they'll be taught and modelled;
- when students will practise them and receive feedback;
- how expectations will become more demanding over time.

ATL is meaningful when it helps students approach disciplinary work with greater skill, judgement and independence. It shouldn't sit alongside the curriculum as a separate list. It should be built into what students are learning and how they're expected to learn it.

Global Context: Connecting Learning to the World

Global contexts help students see how subject learning connects with wider questions, experiences and issues. They can give a unit greater relevance, but only when they shape the learning itself.

Choosing a context isn't enough. It needs to influence the examples students study, the questions they explore, the perspectives they consider and, where appropriate, the way they use what they've learned.

A global context shouldn't be treated as a worthy theme added to the planner. Its purpose is to give the learning a meaningful setting and help students understand why the knowledge and ideas matter beyond the immediate topic.

What Context Adds to Learning

Context changes how students interpret what they're learning. The same knowledge or concept can lead to different questions depending on the setting in which it's examined.

A unit concerned with systems, for example, might examine how environmental, economic or social systems operate under particular conditions. The context affects which cases are chosen, whose experiences are considered and what consequences students are asked to examine.

Teachers need to ask:

- What does this context help students notice or understand?
- Does it change the questions the unit explores?
- Does it influence the examples, evidence or perspectives selected?
- Does it help students see why the learning matters?
- Would the unit remain essentially the same without it?

When removing the context changes nothing, it probably hasn't shaped the unit in any meaningful way.

Choosing a Context with Purpose

A context should help students make better sense of the subject. It shouldn't be chosen simply because it sounds important or fits neatly with a broad theme.

When planning, teachers might consider:

- Does it help narrow the inquiry, or make it too broad?

- Do students have enough knowledge to engage with it properly?

Can it be explored with some depth in the time available?

Broad ideas such as sustainability, identity or globalisation can be useful, but they're often too large to guide a unit on their own. They need to be grounded in a particular issue, place, period or relationship.

The context should give the learning greater focus. It shouldn't make the unit bigger simply for the sake of appearing relevant.

Using Context Throughout the Unit

A context only matters if students keep returning to it. It shouldn't appear in the opening lesson and then disappear once the main content begins.

The context may shape:

the examples and case studies students examine;

- the questions they're asked;
- the perspectives included;
- the evidence they work with;
- the way they apply or communicate what they've learned.

That doesn't mean every lesson needs an obvious global connection. Some lessons will focus on building the knowledge or skills students need. The important thing is that the context continues to influence the direction of the unit rather than sitting alongside it.

Students should gradually understand not only the subject content, but how that content helps them make sense of the issue or setting being explored.

Avoiding Superficial Contextualisation

A context becomes superficial when it changes the language of the unit but not the learning.

Common signs include:

- the same unit could be taught unchanged under a different context;
- the context appears in the introduction or reflection but nowhere else;
- students are asked for opinions without enough knowledge or evidence;
- a broad issue takes over and the subject learning becomes unclear;
- the assessment makes little use of the context.

Context should help students examine an issue through the discipline, not replace disciplinary learning with general discussion. A science unit involving sustainability, for example, still needs students to use scientific knowledge and evidence rather than simply explain why sustainability matters.

When Learning Leads Beyond the Classroom

Some units lend themselves naturally to work beyond the classroom. Students might share findings with a real audience, speak with people who have relevant experience, investigate a local issue or use their learning to inform some form of action.

That can add value, but only when it grows from the subject learning. An external audience or community connection shouldn't be added simply to make a unit feel authentic.

Teachers need to consider:

- What will students understand more deeply because of this engagement?
- Are they using knowledge and methods from the subject?
- Have they been prepared to work with the people or issues involved?
- Is the activity realistic within the time available?
- Does it contribute to the learning, or mainly add complexity?

Learning beyond the classroom doesn't always need to involve a major project or formal partnership. A carefully chosen interview, local data set, audience or case study may be enough to give the work a stronger connection with the world students are studying.

When Learning Leads to Action

Some learning may lead students to take action, but that action shouldn't be manufactured to satisfy a planning requirement. It might involve sharing findings, changing a practice, contributing to an existing initiative or

continuing an inquiry. Sometimes the most responsible response is to listen, learn more or decide that immediate action isn't appropriate.

Any action should grow from what students have come to understand and draw on the knowledge and practices of the subject. Students also need to consider who may be affected, whether their response is useful and what they can realistically contribute.

Opportunities for service and action can be planned across the wider programme without being forced into every unit. The connection is worthwhile when it adds something genuine to the learning. When it doesn't, the unit doesn't need it.

Global context earns its place when it changes the learning: the examples students examine, the questions they ask and the perspectives they consider. Connections beyond the classroom, including action, can add something valuable, but only when they grow naturally from the subject rather than being added for appearance's sake.

Sustaining Curriculum Coherence

Designing a coherent curriculum is only the beginning. It also needs to survive changes in staffing, competing priorities and the gradual adjustments teachers make as units are taught.

That doesn't happen through tighter templates or more frequent document checks. It depends on departments having a shared understanding of the curriculum and enough time to examine whether it's working as intended.

From Documentation to Professional Dialogue

Curriculum documents are useful when they make important decisions visible. They should help teachers understand what students are meant to learn, how the learning builds and why particular choices have been made.

Problems arise when completing the document becomes the main purpose of curriculum work. A planner may contain concepts, ATL skills, context and assessment criteria without showing whether those elements have shaped the teaching in any meaningful way.

Departments need to use curriculum documentation as the starting point for discussion. They should be asking:

- Why has this knowledge been selected and sequenced in this way?
- What are students expected to understand by the end of the unit?
- How does the assessment reveal that learning?
- What does this unit rely on, and what does it prepare students for?
- Which parts of the plan need reconsidering after seeing how students responded?

The document records the thinking, but it can't replace the conversation behind it.

Collaborative Curriculum Review

No individual teacher can see the whole programme. Departments need regular opportunities to look across units and year groups together, particularly where learning depends on what came before.

Review is more useful when it has a clear focus. A team might examine:

- whether units connect and build as intended;
- where knowledge or skills are being repeated without enough development;
- whether assessment matches the learning students have been prepared for;
- where expectations increase too quickly or not enough;
- which units need revision before they're taught again.

The aim isn't to review everything at once. A focused conversation about one sequence, assessment or area of progression is more likely to lead to a useful decision than a broad annual audit.

This work also needs the right people in the room. Teachers from different year groups need to understand one another's expectations so they can see where assumptions, gaps or unnecessary repetition have developed.

Using Evidence to Improve the Curriculum

Curriculum review should draw on what actually happened when the unit was taught, not just what the plan said would happen.

Useful evidence might include:

- student work;
- assessment patterns;
- common misconceptions;
- parts of the unit that needed more time;
- tasks students completed without showing the intended learning;
- feedback from teachers who taught the unit.

The purpose isn't to explain every weak result by changing the curriculum. Student performance is shaped by many things. But when the same difficulty appears across classes or year groups, it may point to a problem with sequencing, preparation, assessment or the clarity of the intended learning.

Teams should use the evidence to make a small number of specific changes, then see whether those changes improve the learning the next time the unit is taught.

Protecting Coherence Over Time

Curriculum changes gradually as teachers adapt units, add new material and respond to immediate pressures. Some changes improve it; others create drift. A sequence can become overloaded, an assessment can start asking for things students haven't practised, or an engaging activity can remain long after its purpose has become unclear.

Departments need to revisit the thinking behind the curriculum, not just update the documents. They should ask whether changes still support the intended learning, fit the wider sequence and leave enough time for what matters most.

Leadership has a role here, but coherence doesn't require rigid control. Teachers need room to improve their units within a shared understanding of the curriculum. Changes that affect sequencing, assessment or progression should be discussed across the department so that an improvement in one place doesn't create a gap or unnecessary repetition elsewhere.

Curriculum coherence is sustained through regular professional attention. Documents need to remain useful, review needs to lead to decisions, and changes need to be considered in relation to the wider programme. The aim isn't to preserve the curriculum exactly as it is, but to improve it without losing the connections that allow learning to build over time.

Conclusion: Curriculum as Deliberate Design

Curriculum shapes what students encounter, how ideas connect and what they're expected to do with what they learn. Its quality lies not in the completeness of the planner, but in the decisions behind it: what is selected, how it is sequenced, where it is revisited and how teaching and assessment work together.

Across the MYP, coherence depends on knowledge, conceptual understanding, disciplinary practice, Approaches to Learning, context and assessment being planned in relation to one another. None of these elements is enough on its own. A concept that doesn't shape the unit, a skill that isn't taught or an assessment that asks for unfamiliar forms of thinking will weaken the learning.

Curriculum also needs to be reviewed in light of what happens in classrooms. Student work, common misconceptions, assessment evidence and teachers' experience should help departments decide what needs refining and whether learning is building as intended.

A coherent curriculum won't remove difficulty, nor should it. It should make challenge purposeful and ensure that students have been prepared for it. That is the work of curriculum design: creating a programme in which learning accumulates, expectations become more demanding and students are increasingly able to think and work within their subjects with confidence and independence.

Further Reading

Black, P., & Wiliam, D. (1998). Assessment and classroom learning.

Bruner, J. (1960). The Process of Education.

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques.

Hirsch, E. D. (2016). Why Knowledge Matters.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work.

Pearson, P. D., & Gallagher, M. C. (1983). The gradual release of responsibility model.

Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning.

Rosenshine, B. (2012). Principles of instruction.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems.

Surma, T., Vanhees, C., Wils, M., Nijlunsing, J., Crato, N., Hattie, J., Muijs, D., Rata, E., Wiliam, D., & Kirschner, P. A. (2023). Developing Curriculum for Deep Thinking: The Knowledge Revival.

Sweller, J. (1988). Cognitive load during problem solving.

Wiggins, G., & McTighe, J. (2005). Understanding by Design.

Willingham, D. T. (2009). Why Don't Students Like School?

Young, M. (2013). Overcoming the crisis in curriculum theory.