

Balance

A unit for students aged 11-12 years

Teaching the International Middle Years Curriculum

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Introduction

The International Middle Years Curriculum has been produced to respond to the need to provide 11-14 year-old students with an exciting and challenging learning experience. Whilst it needs you to bring it alive, it does provide you with an enormous amount of help. This short guide gives some idea of the important issues you need to think about when using it with the students in your classes.

Where good learning comes from and why a curriculum is important

Students learn what they learn from all sorts of places, people and experiences. Much of this learning is accidental; it just happens.

Accidental learning takes place in schools as well as everywhere else. Deliberate, planned learning is what schools are for. You are *responsible* for that deliberate learning. That's why you are so important. You are more important than the resources you have, the buildings you are in, the quality of your principal, headteacher or superintendent and, dare we say it, more important than your curriculum.

A teacher with great resources, a great building, a great principal, great parental support and a great curriculum can still very easily make learning a dull or negative experience for students. And it is equally true that a great teacher can do so much more than his or her resources.

Nevertheless, you need support. If you have ever tried to teach in a poorly organised school, or one with poor resources, or a school with no vision, you'll know what we mean. If you have good support systems, then you also have the opportunity to teach as well as you can.

A curriculum— any curriculum—is one of your most important support systems. The International Middle Years Curriculum has been written to help you be the best teacher you can and, even more importantly, help your students receive the best 21st century education possible.

The structure of an IMYC unit

All of the 30 units from which schools can choose the six they wish to use each year are designed to be consistent.

- 30 thematic units (10 to choose from each year over 3 years)
- Entry Point
- Knowledge Harvest
- Learning Goals
 - Subjects
 - International mindedness
 - Personal
- Learning Activities
- Reflective Journaling
- Exit Point
- Assessment for Learning

Themes and the Big Ideas

Each theme is assigned to a grade level. There are 30 themes overall; 10 in each year or grade.

The brain development of students around the middle years facilitates and stimulates a search for identity, meaning and connection. For really the first time, opportunities for the deepening of understanding begin to be real as do, therefore, opportunities for teachers to spend time focusing on these complex conceptual ideas. The challenge is to find conceptual themes that are challenging but not out of reach for middle years students.

That's what the Big Ideas are in the IMYC. Each Big Idea begins from and is related to a theme. The theme is the essential coordinating device of the unit. It coordinates the work of teachers and students and the learning that is happening, obviously. But it also coordinates the opportunity in the IMYC for students to see how subjects work both independently and interdependently.

The themes provide opportunities for all subject teachers to collaborate around a common concept while students move from subject to subject. The theme encourages high ordered thinking and deeper understanding as students investigate how the theme is related to and translated into each subject area including personal development and international mindedness.

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Here are the themes and the Big Ideas of the 10 units from which teachers and schools can choose in the first year of the IMYC:

Theme: Adaptability

Big Idea: Adaptability is demonstrated by the ability to cope, alter or change with new circumstances or environments.

Theme: Balance

Big Idea: Things are more stable when different elements are in the correct or best possible proportions.

Theme: Celebration

Big Idea: There is value in recognizing and observing special events through ritual and with joy and happiness.

Theme: Collaboration

Big Idea: When people work together, they can achieve a common goal.

Theme: Consequences

Big Idea: Very few actions are neutral. Most actions create impact or change that then have to be dealt with.

Theme: Creativity

Big Idea: New ideas can happen when existing or innovative ideas are brought together or expressed in a new way.

Theme: Discovery

Big Idea: Finding out new things is a human driver and affects things for better or worse.

Theme: Resolution

Big Idea: Problems, disputes and contentious issues can sometimes be satisfactorily solved or resolved.

Theme: Risk

Big Idea: Progress involves exposing ourselves to and considering the impact of forms of danger, harm, uncertainty or opportunity.

Theme: Structures

Big Idea: Formal arrangements and relationships (structures) underpin or give organisation to complex issues.

Learning Goals and Learning Targets

Everything is based on clearly defined learning goals and standards, which outline the knowledge, skills and understandings across all of the subjects and international mindedness as well as the personal dispositions students need to develop through their middle years experience and through their lives.

The explicit learning targets are derived from the learning goals by teachers so that the learning takes advantage of your school's local and particular contexts. If the learning goal talks about students knowing how rivers are formed, the learning *target*, developed and extended by the teacher (and perhaps the students, together) will be specific about which river is going to be studied.

Learning *goals*, are the general context-free descriptions of the knowledge, skills and understandings that students should achieve. Learning *targets* are the explicit outcomes that students know they have to reach, but each of them is an example that supports the broader learning *goal*.

Implications for teachers

By using the learning goals, teachers will know the broad learning outcomes for their subject within each unit of work.

Teachers then have the freedom to decide how to make each learning goal into a specific learning target that uses contextual knowledge appropriate to the students, the location and the school's context. The teachers and possibly students will write their own specific targets.

Teachers will need to be aware of the differences in the way knowledge, skills and understanding are learned, taught and assessed. In order to help learning develop as well as possible, they will need to create, throughout the three-year period of the IMYC, multiple opportunities for the practice of skills and sufficient time in classroom for students to properly practice.

Implications for students

Students will know the precise nature of the learning they are expected to know, develop or deepen. For early secondary school students, this will help them focus more clearly on what it is they have to know, do or understand.

Implications for schools

Schools will need to think about the extent to which their current scheduling is learning-focused, i.e. the extent to which it helps or hinders the development of skills and understanding in particular.

Implications for teachers

The Entry Point is where teachers set the stage for learning and launch the unit and its Theme. Same grade level students will gather together for a half day or full day for this experience (and, just occasionally, even longer). Students can be organised in a variety of

ways, depending on what suits the school. The Entry Point is used to generate excitement about the theme and learning at hand. Students and teachers will engage in an exciting task that will prepare them to think personally, locally and globally about the theme and its impact on learning.

Teachers will have to decide how best to make the Entry Point work in their own school. In our experience (although we would be happily proven wrong) it is unlikely that each subject teacher will provide an Entry Point of their own. Teachers may well work together with all of the students (collectively or in groups) right at the beginning of the unit. Alternatively, teachers may delegate responsibility for the Entry Point to colleagues who clearly have strengths in creating these kinds of events.

Each unit of work provides an outline example of what an Entry Point might be, but teachers should be as creative as possible within their own setting and within their time and organizational constraints.

Implications for students

Students will have one morning, day or couple of days to come together for an engaging experience where they join together in an activity, which will set the stage for the unit to come. The Entry Point is intended to help them feel anticipation, excitement and energy from the buzz of starting a new unit and collaborating with friends and teachers as they embark on something new.

The Entry Point should be the one time during the unit when students have little clue as to why a particular activity is happening.

The Entry Point

The Entry Point should provide a 'WOW' factor which generates interest and excitement for students aged 11-14. It takes place before any of the 'formal' work begins. Consider activities outside of the box, outside of the classroom and possibly outside of the school. We have found over the past two years that although the Entry Point is not essential, it has been hugely successful in helping students begin to orient their thinking.

For 11-14 year-olds, the Entry Point may last half a day or a day. It is unlikely to last longer unless teachers can come up with exceptionally strong ideas.

There are many different Entry Points that will help students begin to experience 'Balance' without the use of formal teaching. For example:

- A school might design a Circus Training School for a morning in which each activity requires balance as a core part of practice
- Teachers might involve students in a 'research project' that involves students undergoing a variety of balancing activities. Any number of scientific or pseudo-scientific justifications could be provided for this.
- The school might distribute a one-sided letter to all students curtailing a well-liked student privilege because of the behaviour of one unnamed student. This letter could

be read out to each class, after which the teacher requests student opinion. Students then send the Head their own response, following which the letter is withdrawn by lunchtime.

The actual content of the Entry Point is not what matters. What does matter is that a) the content reflects the Theme of the unit and is the first opportunity to make a connection to it; b) the Entry Point requires student engagement; c) the Entry Point is not used for teaching; and d) no one gives the game away.

The Knowledge Harvest

The Knowledge Harvest is the first formal learning activity. The purpose of the knowledge harvest is to give students an opportunity to share and display what they already know about the theme within each subject, the skills that might be learned, and the deepening understanding they may already bring with them. Each subject teacher who participates in the unit will conduct a knowledge harvest specific to his/her class set in the context of their own subject.

You can carry out the Knowledge Harvest in a number of ways as you begin the Unit through your own subject. You might:

- Discuss with your students what they already know about the idea of 'balance' in the context of your subject
- Ask students to create their own individual mind maps around the theme of 'balance' and your subject
- Create a class mind map as a large wall display to which all students contribute

Implications for teachers

The Knowledge Harvest will be conducted in individual classes by subject teachers. Each subject will have its own unique connection to the theme through the articulated learning *goals* and learning *targets*.

The Knowledge Harvest helps teachers to link new ideas to students' current thinking, to prevent students from engaging in repeated learning which is already consolidated and secure, and to make sure that the activities stay fresh for students. It's a pre-assessment or pre-evaluation task.

Teachers will need to be aware that consolidated existing knowledge will most likely not need to be revisited during the learning. Skills will, though, need to be continually practised as students move through the beginning, developing and mastering stages. Equally, there will need to be ongoing opportunities for reflection to enable students to deepen their understandings.

At some point, it would be helpful to have a way for subject teachers and students to display the Knowledge Harvest together in a common area. There are many ways in which this can be done, but large scale wall mind maps have been used successfully in the upper years of the International Primary Curriculum. Mind maps, for example, allow a developing map of the learning to be created as the unit progresses.

Implications for students

During the Knowledge Harvest students will talk about, review and reflect on their prior knowledge, skills and understanding to be encountered during the theme. In this way they will share what they know, can do and have a developing understanding of, as well their personal meaning of the theme. They will show their teachers what they already know to avoid wasting time and build their confidence by realising that they already have learning on which to lock their new experiences.

Students will need to be aware of the different nature of knowledge, skills and understanding so that they are aware through the Knowledge Harvest which kinds of learning it is legitimate to revisit.

Learning activities

The learning activities in the units follow a pattern of 'Research and Record'.

Research Activities

The research activities in each unit are designed for students to carry out research and investigation through the prompting of appropriate questions. Researching is the time at which students get information into their brains, are able to appreciate skills in action, and use the different levels of understanding they have already developed.

Students must be given opportunities to think through their research (what they have learned) and to record it (process the information they have received) using their multiple intelligences.

Implications for teachers

Teachers will need to have an appreciation of the impact that learning styles have on the acquisition of knowledge and the development of skills. The Teachers' File explains learning styles in more detail. Teachers will need to be ready to facilitate a range of ways in which students can access information or practise skills.

Implications for students

Students will need to be aware of how their different learning styles impact their ability to access information efficiently.

Recording Activities

Recording activities require students to process and order the information they have acquired, to consciously improve their skills, and to deepen their understandings. As research activities are linked to learning styles, so recording activities are linked to intelligence and the way the brain processes information. We think it is helpful to consider intelligence as a process; the process of what the brain does with the information it receives. You will find detailed explanations of this elsewhere in this Teachers' Manual.

Implications for teachers

Teachers have two contrasting goals to achieve when asking students to record.

First, they have to encourage students to become more effective recorders of their thinking and processing through writing, simply because writing has high status in the 21st century and, particularly, in examinations.

At the same time, teachers have to be aware that written recording does not play to every student's intelligence profile. Visually intelligent students are likely to be better at recording information graphically. Mathematically-logically intelligent students may prefer to record through charts.

Teachers need to be aware that an inability to record thinking and processing in written format is not necessarily evidence of a lack of thinking or processing. They need to reflect this in the activities they create for students. They need to be able to offer students alternative ways of recording information at the same time as encouraging the continual development of writing skills, and in the way they assess learning.

Implications for students

Students need to know why the continual development of writing skills is important. At the same time, they need help to see that relative difficulty in this area may have little to do with their processing abilities and to recognise the value of other kinds of recording as a way of demonstrating their intelligence.

Journaling

The IMYC sees *Understanding* as the creation of coherent schema through a combination of the acquisition of knowledge, the practice and continual development of skills and extended time for reflection.

Throughout each unit, students will participate in daily or weekly journal writing. The primary purpose of the journal writing is to provide some initial reflective time for students to consider the unit theme and its Big Idea through directive and orienting questions driven by the activities in each theme.

Student journal entries will be open-ended but will be directed by questions that will be comprised of different perspectives brought up in each activity in each subject by each theme. Some of the questions will be dispositional, while others will foster international mindedness by encouraging students to consider the perspectives of themselves, their families, and others throughout different activities.

Journaling can be done as class activity, as homework, or during homeroom or advisory times. Journaling will provide reflection time, and may help students organise their exit point project. This is a key element in developing understanding over three years.

Implications for teachers

Teachers will need to be clear about the developmental and personal nature of

understanding and how it develops. Teachers will need to support the importance of finding time for reflection through journaling.

At the same time, teachers will need to support and scaffold secondary school students through the process of reflection rather than the achievement of a correct answer (as in *knowledge*) or the achievement of a rubric description (as in the development of *skills*). In the end, the judgment about a deepening understanding is not whether it is right or wrong or moving to mastering but whether the process of reflection that has led to it is both authentic and rigorous.

Implications for students

Appropriate journaling and reflection fits with the middle school student's growing desire to find meaning. Students need to be aware of the differences between knowledge, skills and understanding and how personal meaning is developed. They will need help appreciating that knowledge, skills and understanding each have their own rigour.

Exit Point

Each of the IMYC units is written to last about six weeks. At the end of five weeks, teachers and students will come together again for an extended period of time (up to a week) for a final formal opportunity to reflect upon their developing understanding of the Big Idea and apply those ideas they have developed into a real context. This is the real opportunity for students to slow think what they have learned throughout the five weeks and organize it into a way that makes sense and is meaningful to them on a personal level. Teachers need to be supportive of the fact that this representation may be very different from how they envision it, but the important thing is to focus on the slow thinking and deep reflection that allowed the student to arrive at the final project idea.

Students are asked to do this by engaging in one of six media projects to help them develop further understanding of what they have taken away from the six week unit. Over one year and the six IMYC units within that year, students will conceive, design and produce:

- A short video item
- A podcast
- A web document
- An application
- A magazine feature
- A presentation

The exit point is an opportunity to do some real work thinking and reflecting whilst producing a media presentation. The hard work is in the thinking, linking and planning which is the meat of the activity. Each media presentation will be relatively short, but will be well thought out, executed and presented with purpose and direction.

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During the exit point, students will take responsibility for choosing, planning, designing and executing the presentation. This is the pinnacle of the unit, in that it provides an engaging and hands-on experience for students to further their understanding of the learning not only through subjects and skills, but also throughout the theme. Because each student will experience their learning in a unique way, this activity will be individual to the understanding the learner gained on a personal level. Often it will be generated by the ideas and deeper understanding that is cultivated through the weekly journaling.

Over the course of a school year, no presentation style is repeated. Over three years, students will repeat each media type three times. This will allow them to observe their progression in each type of media form, as well as their beginning, developing and mastering of knowledge and skills.

Implications for Teachers

All students and teachers will come together during this time so that students can collaborate on a project. Teachers should be available for questions, guidance and support as students plan, organise and create a representation that furthers their understanding through one type of media.

The Exit Point represents one of the ways in which teachers have to work together interdependently. The Teachers' File (and the Members' Lounge on the IMYC website) contains practical advice about the organisation of the Exit Point. Nevertheless, as with the Entry Point, it is important for teachers to spend time working out the leadership and practical organisation of the Exit Point in a way that will work within their school but, most importantly, help students reflect.

Teachers will do everything possible to allow students to take responsibility for the Exit Point whilst providing the structure and expectations to guide the students through this process. Teachers should also expect to provide a time line, check in dates and assistance as students navigate through this process. Time must also be given for students to present their project to their peers, families and/or community. Teachers and students together may create the places where students' work can be seen publicly, such as YouTube sites, Learning websites, printed publications and so on.

Teachers will be accountable for monitoring students during the Exit Point and helping them reflect rigorously and problem-solve production issues that arise.

Teachers and students will be responsible for maintaining the work produced so that the developing understandings and media production skills of students can be compared over time by, for example, comparing their Year 7 podcast with their Year 8 podcast.

Teachers will collaborate with each other to offer the best possible support to students during the Exit Point. Particular responsibilities will be dependent on the strengths of the Teaching group.

Implications for students

Our evidence tells us that students will look forward to this time as a chance to collaborate with friends and peers. They will also have a great responsibility for their learning as

they enter the final stage of the unit. The ownership is on the students to create a media project that represents a real context for their developing understanding. The work is in the thinking and will be showcased through the media form. Students will develop their understanding of the unit and what it means for them through their media presentation.

Implications for schools

Schools should find ways of giving value to the time spent on these rigorous Exit Points. Schools need:

- To allow some variation in normal scheduling
- To provide the necessary resources
- To enable teacher planning time
- To create the means of displaying and valuing students' reflective work in a serious but accessible way

Assessment for learning

Assessment and Evaluation are important. They are the way we find out whether and to what extent students have learned. The Teachers' File contains detailed information and guidance about assessment and evaluation. Briefly the IMYC believes that:

- *Assessment and Evaluation* differ. *Assessment* is used when the outcome is clearer and relatively unproblematic. *Evaluation* is used when the outcome is less clear and more problematic. *Evaluation* requires the use of evaluative judgments.
- *Knowledge* is assessed most effectively and efficiently through conventional tests. This is because knowledge – in the way we use it in the IMYC – is 'true' or 'not true' for now. Paris *is* the capital of France. Lyon is not. We expect Knowledge – 'Students will know that...' to be assessed in this way in the IMYC.
- *Skills* are assessed and evaluated. In the IMYC, skills develop through the three age-appropriate stages of Beginning, Developing and Mastering. Each stage is described descriptively and, therefore, might appear to be capable of knowledge style simple assessment. But the change from one stage to another – when a student moves from Beginning to Developing is not clear and requires judgment on the part of the teacher and the student.

Another core difference between the assessment of *knowledge* and the assessment and evaluation of *skills* is that the assessment of knowledge is often decontextualised. (You don't have to be in Paris or even to be able to find it on a map to know that it is the capital of France.) *Skills* always happen in context. (I can only tell that you can ride a bike and at what stage of development you are riding the bike by observing you actually ride it.) So skills cannot be tested decontextually; they have to be observed in practice.

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In the IMYC, skills will be assessed and evaluated through the use of the Assessment for Learning Programme. (See below.)

- *Understanding* is evaluated. Because understanding is fluid and personal it can never be 'right' or 'wrong'. That's why the evaluation of understanding requires judgment.

Within the IMYC, there are a number of opportunities for teachers to evaluate students' developing understanding of the theme including reflective classroom conversation, the contents of students' journals and the way in which they conceptualise their understandings in the final Exit Point.

During the Exit Point students are expected to work collaboratively and have fun. But they are also expected to think carefully about the content of their presentation and work hard to provide the best presentation they can. But the judgement that is made by teachers should be focused on the quality of reflection and thinking; this is where the students' developing understanding will be made visible.

The Assessment for Learning Programme

The IMYC contains an Assessment for Learning Programme. In this Programme:

- The core skills of each subject are identified
- Each skill is described through rubrics at three levels of development – Beginning, Developing and Mastering
- These rubrics can be used by both teachers and students
- Advice is given to teachers on how to help students move from one level to another
- An on-line and secure database allows student performance in skills to be recorded, tracked and disaggregated

Implications for teachers

Teachers will need to develop their own skills of observing students' skill development in action in the classroom.

Teachers will need to familiarise themselves with the different levels of development of each skill.

Teachers will need to appreciate that skills development takes places over a different time span than either knowledge or understanding. In the IMYC the expectation is that students will move from Beginning through Developing to Mastering over the course of the three years.

Teachers will need to familiarise themselves with the on-line database.

Teachers will need to involve students in the assessment and evaluation of skills by co-sharing access to the rubrics, by helping students to be clear about them, and by allowing students time for self-assessment by using student self-assessment as part of the process.

Implications for students

Students will need to know and to be able to articulate the differences between knowledge, skills and understanding, how each develops and the time scales appropriate for each.

Students will need to become skillful in using the rubrics and at self-assessment of skills.

Mathematics and the IMYC

IMYC units of work help you help your students learn most of these learning goals. As you may have noticed, the units do not provide specific opportunities for students to learn maths but the units do give students the chance to put some of their maths into practice.

There is a simple reason for this. In talking to teachers and schools during the planning phase of the IMYC, most told us that they already had invested heavily in a maths scheme or programme of work that worked well enough in their school. So it was pointless producing units of work that contained material teachers were unlikely to use. Nevertheless, the maths learning goals are important because in addition to all of their other uses, schools can also use them as a checklist against which they can monitor the coverage of the material they have.