Fieldwork Education
Improving Learning

International Primary Curriculum (IPC)

a. **Curriculum Guide 2019-2021**

Contents

1. Introducing Fieldwork Education

We are an organisation that puts Improving Learning at the core of all we do

Fieldwork Education has been improving learning in schools for more than 30 years through consultancy, the International Early Years Curriculum (IEYC), International Primary Curriculum (IPC) and International Middle Years Curriculum (IMYC).

We support this with our professional learning range for schools and a rigorous accreditation process. Our support for schools is shaped around the unique developmental needs of each learning age group, with the aim to strengthen children's moral, social and cultural development.

From the very start, our focus has been on helping schools improve learning, and we have since supported thousands of schools in over 90 countries worldwide.

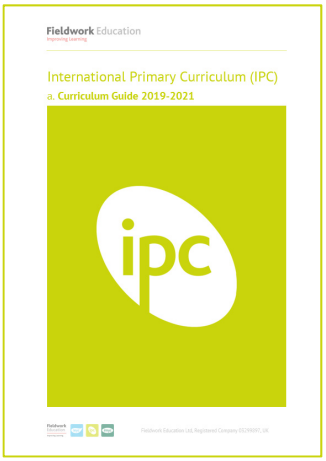
Fieldwork Education

2. Curriculum documentation overview

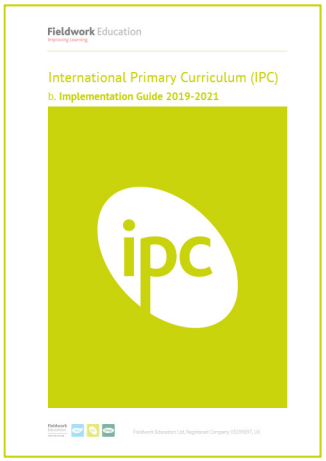
An explanation of the core documentation that supports the IPC, including this Curriculum Guide

Fieldwork Education provides an architecture of core documentation that has been designed to support schools throughout their respective journey with the IPC, from its initial introduction as a curriculum by the school, through to the school's accreditation and re-accreditation of their implementation of the curriculum.

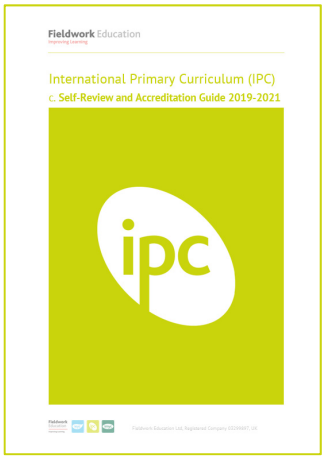
The structure of the core documentation for the IPC is:



a. Curriculum Guide



b. Implementation Guide



c. Self-Review & Accreditation Guide

a. Curriculum Guide

This Curriculum Guide for the IPC aims to provide an introduction and overview of the IPC to schools, with the view to help schools' understanding of the design and philosophy of the IPC.

b. Implementation Guide

The Implementation Guide for the IPC aims to provide teachers and leaders with advice on how to implement and review the curriculum.

c. Self-Review and Accreditation Guide

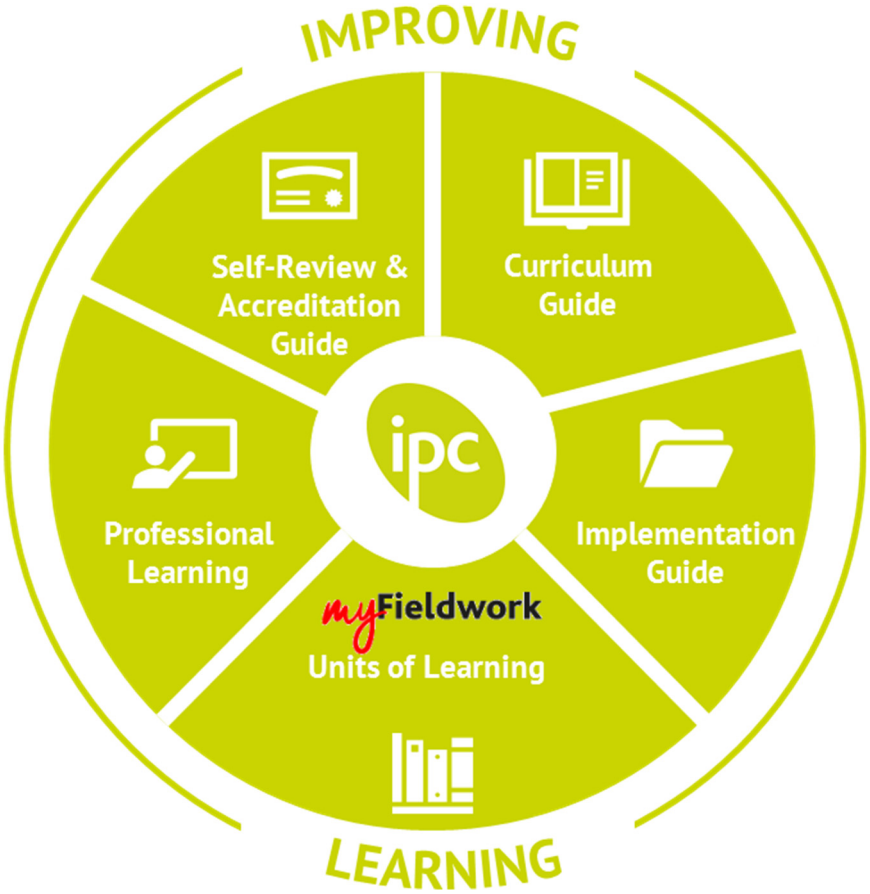
The Self-Review and Accreditation Guide for the IPC aims to provide teachers and leaders within the school with a detailed set of criteria and standards that are required for a school to be externally accredited and re-accredited by Fieldwork Education for its implementation of the IPC. The Self-Review and Accreditation Guide contains the 3rd edition IPC Self-Review rubrics which were introduced in March 2019.

3. What is the IPC?

The origins and design of the IPC

The IPC was originally designed to provide a curriculum for learners in the primary years, where multiple nationalities and backgrounds of learners were present within the same school. In the late 1990's, significant research and development led to the initial version of the IPC being developed as a curriculum that supported learning, irrespective of the geographic location of the school or the nationalities and cultural background of the learners. The IPC as a complete curriculum was first used in 2000 and has since been implemented as a leading international curriculum for primary learners in thousands of contexts worldwide. Fieldwork Education continuously enhances and reviews the IPC to ensure it remains relevant as a leading international curriculum for learners around the world and utilizes the educational research to do so.

The IPC is a comprehensive curriculum for 5-11-year olds and is used in over 1,000 schools in over 90 countries worldwide with the following components:

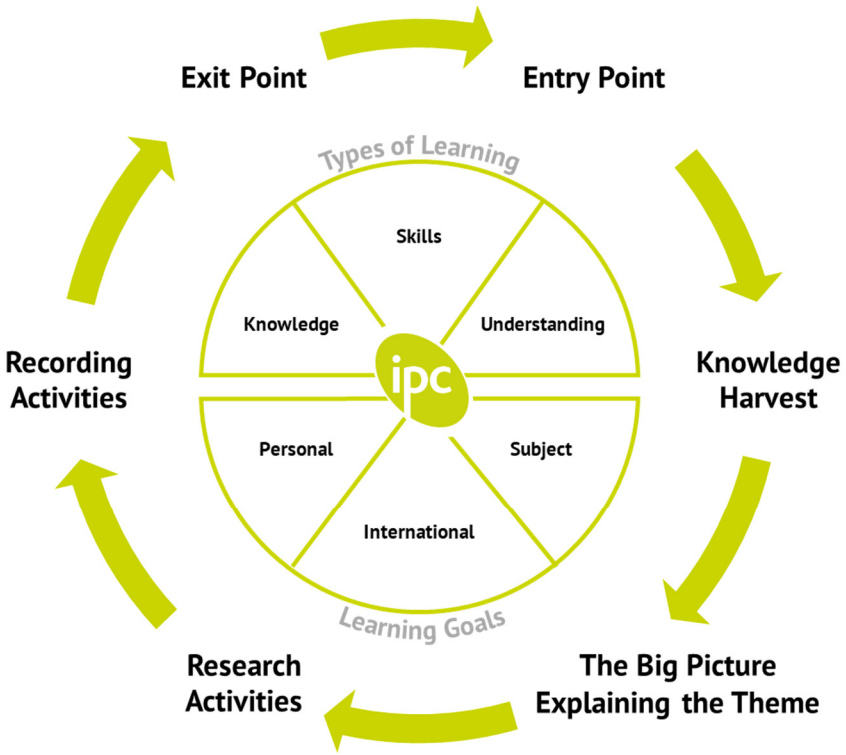


The philosophy of the IPC is designed around three essential constructs:

- The Learning Goals for the IPC seek to encourage the holistic development of internationally-minded learners, with three categories of Learning Goals being defined, consisting of: 'Personal'; 'International'; and 'Subject' Learning Goals.
- Rigorous and deep learning is represented by different types of learning. These types of learning have been defined by Fieldwork Education under the categories of Knowledge, Skills and Understanding. The IPC is designed to address each of these types for learners.
- The IPC Learning Process outlines the route to be taken through a unit. The stages are defined as the 'Entry Point'; 'Knowledge Harvest'; 'The Big Picture – Explaining the Theme'; 'Research Activities'; 'Recording Activities; and 'Exit Point'. The IPC comprises a diverse range of exciting, engaging and globally relevant thematic units of learning, which are designed around the IPC Learning Process.

The representation of the IPC as a curriculum model, including the Learning Goals, Types of Learning and Learning Process is provided below.

The IPC Learning Goals, Types of Learning and Learning Process



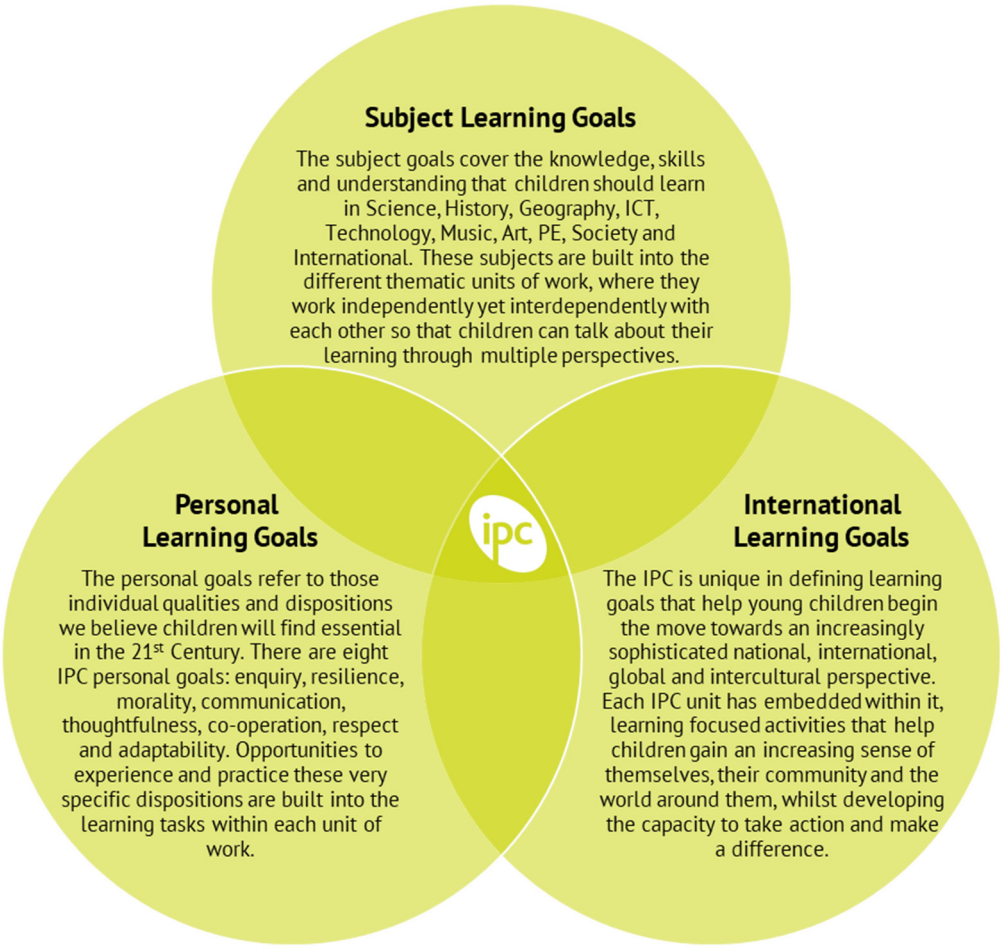
3.1.The IPC Learning Goals

The IPC Learning Goals are so central to the IPC that it's important to think about the language used when talking to the children, with colleagues and with parents. An IPC teacher talks about what children have learned before they talk about what children have done. The clear, precise Learning Goals give schools, teachers and leaders the chance to do that much more easily.

It is important to note the difference in the Learning Goals between 'Knowledge', 'Skills' and 'Understanding'. All of the Learning Goals are written in one of these three ways (see Appendix A). These differences are particularly important.

The IPC Learning Goals are important for a number of reasons. They:

- Help schools identify the knowledge, skills and understanding children should be learning
- Help schools focus on the most appropriate teaching strategies
- Help schools decide on the best sort of assessment/evaluation to use.



Personal Goals

The IPC Personal Goals underpin those individual qualities and learning dispositions that Fieldwork Education believes children will find essential throughout the first half of the 21st Century.

There are eight IPC Personal Goals:

- **Enquiry**
- **Resilience**
- **Morality**
- **Communication**
- **Thoughtfulness**
- **Cooperation**
- **Respect**
- **Adaptability**

A more detailed breakdown of the IPC Personal Goals and their definitions can be found in Appendix A on page 61.

International Goals

The IPC is unique in defining International Learning Goals that help young children begin the move towards an increasingly sophisticated national, international, global and intercultural perspective and develop a sense of international-mindedness.

The International Learning Goals can be found in the Appendix A on page 64. Each IPC unit has embedded within it, across the different subjects, learning-focused activities that help children start developing a global awareness and gain an increasing sense of themselves, their community and the world around them, as well as inspiring positive action and engagement with global issues. In addition to this, each thematic IPC unit of learning includes specific tasks related to International as a subject in its own right, as well as encouraging schools to explore the unit from the perspectives of both the 'host' country (the country 'hosting the school') and 'home' country (the country which children call 'home'). In some cases, 'host' and 'home' will be the same country, so schools will choose at least one other country to explore within a unit of learning.

The aim of the International Goals are to equip learners with solutions to the following:

- How they can get along and how they can disagree in a way that is helpful?
- How they can be proud of their own national heritage and culture and, at the same time, deeply respectful of the heritage and culture of others?
- How they can achieve more by coming together than staying apart?

Subject Goals

The subject learning in the IPC is organised around carefully selected themes. Themes (such as 'Chocolate') reflect the interests of children in this age range. It motivates them and drives them to want to find out more. Within these units children learn through the lenses of different subjects, including Science, History, Geography, Music, Art, ICT and Computing, Technology, PE, Society, International and World Languages. We don't just 'do Geography' in the IPC. We look at some geographical aspects within the unit, such as 'Holidays' or 'Fitness'. Organising learning in this way also helps children to see how subjects are both independent and interdependent enabling children to see The Big Picture of their learning, make connections through and across different subjects, and talk about a theme from multiple perspectives. The online Route Planner (available through MyFieldwork) helps schools to plan which IPC units they would like to teach and track the coverage of the Learning Goals in each subject within the units, to ensure a broad and balanced curriculum.

A full set of IPC Subject Learning Goals can be found in Appendix A on pages 23-60. These include Learning Goals for Mathematics and Language Arts.

3.2.The IPC Types of Learning

Fieldwork Education believes that differentiating between Knowledge, Skills and Understanding is crucial to the development of children's learning. We also believe that Knowledge, Skills and Understanding have their own distinct characteristics that impact on how each is planned for, learned, taught and assessed. The implications of these differences are therefore far-reaching and deserve proper consideration.

- **Knowledge**

The Fieldwork Education definition of Knowledge as a type of learning refers to factual information. Knowledge is relatively straightforward to teach and assess (through quizzes, tests, multiple choice, etc.), even if it is not always that easy to recall. You can ask your children to research the Knowledge they have to learn but you could also tell them the Knowledge they need to know. Knowledge is continually changing and expanding – this is a challenge for schools that have to choose what Knowledge children should know and learn in a restricted period of time. The Knowledge content of the IPC units can be adapted to any national curricula requirements.

- **Skills**

At Fieldwork Education, we define Skills as a type of learning that refers to things children are able to do. Skills have to be learned practically and need time to be practiced. The good news about Skills is the more your practice, the better you get at them! Skills are also transferable and tend to be more stable than knowledge – this is true for almost all school subjects. The IPC's Assessment for Learning Programme is based around the assessment of children's Skills.

- **Understanding**

Fieldwork Education refers to Understanding as making meaning. Understanding is personal and connections have to be made actively by the learner in order to make meaning. Multiple opportunities should be offered for learners to develop and demonstrate their understanding. Understanding includes components of knowledge, skills and experience, and the IPC units allow you to provide a whole range of different experiences through which children's understandings can deepen.

3.3.The IPC Units of Learning

The IPC units of learning are thematically based and designed to last for a number of weeks. Within the timeframe of each unit, children focus on that theme through one particular subject before moving onto another subject. Very few units focus on just one or two subjects; most help children learn about a number of subjects.

Within each unit, the different subjects have been blocked into periods of time that usually last from one to three weeks. This blocking is an important part of the IPC. Organising units in this way helps children to see how subjects are both 'independent' and 'interdependent'.

3.4.The IPC Learning Progression – through Mileposts

The IPC units of learning have been developed around a process which supports the ways in which children learn best from the ages of 5-11 years. It is important that children don't just experience the structure and process of the IPC, but also that they understand why they are learning in this way. A critical component is the grouping of years into defined mileposts – 'Milepost 1, 2 and 3'. This grouping of years into mileposts is applicable to both the design and selection of units learning and also the identification of learning goals and learners' progression through the IPC.

The units of learning can be found on MyFieldwork under Curriculum and Units. They are divided into Mileposts 1, 2 and 3:

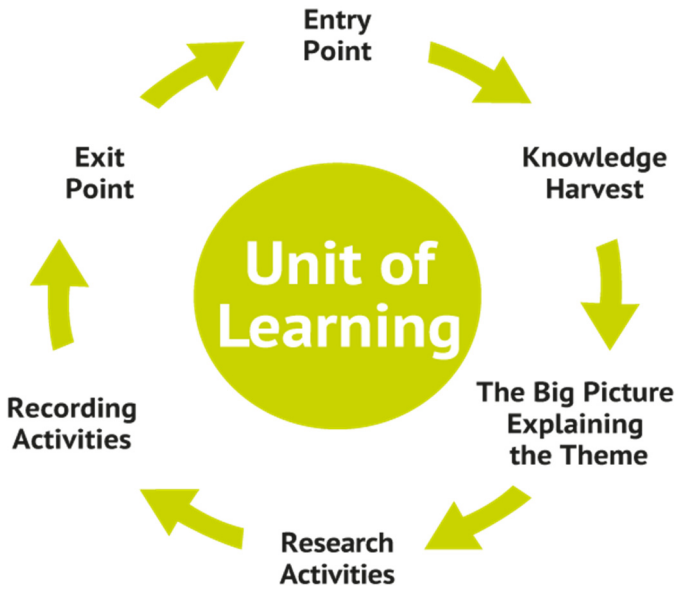
Milepost	Age group of children	Number of units available
1	5-7	39
2	7-9	41
3	9-11	51

3.5.The IPC Learning Process

The IPC units of learning have been developed using the underpinning research process which supports the ways in which children learn best from the ages of 5-11 years. It is important that children don't just experience the structure and process of the IPC, but also that they understand

why they are learning in this way. Each unit of learning for the IPC provides schools and teachers guidance and recommendations for each of the stages within the process.

The IPC Learning Process



- The **Entry Point** is an exciting and memorable event that launches every IPC unit. The aim of the entry point is to get children thinking about, and engaged with, the learning that's to follow.
- The **Knowledge Harvest** provides teachers with the chance to find out what children already know about the theme and helps them to personalise the unit by finding out what children want to learn in order to tailor their lessons accordingly. It reinforces connections between existing and new learning and allows children to take ownership of their learning.
- **Explaining the Theme** provides teachers, children and parents with the big picture of the unit before it launches so that connections between subjects and concepts can be facilitated.
- The **Big Picture** provides teachers with subject-based background information and research which links to the learning contained within each unit.
- **Research Activities**: Each unit of learning outlines suggested subject areas, each with planned research activities which are designed to make sure that children can access information in a way that is appropriate to them, drawing on a wide range of learning approaches such as role play, digital learning, library research and so on. IPC research activities have been designed to be experiential and exploratory. Some are collaborative;

others are designed to develop individual enquiry and resilience, and therefore help to embed and develop the IPC Personal Goals.

- **Recording Activities**: The recording activities enable children to process and present the information they have gained in their research activities through a range of approaches which tap into their different strengths and interests and enable them to get better at other ways of recording. This might involve learning through digital recording, drama, musical compositions, maps, graphs, experiments, art work and so on.
- **Exit Point**: the Exit Point completes every unit. It helps children to draw on their prior learning, reminding them of all the connections between subjects that they have made, and creates time and opportunities to build their understanding of their learning, and to reflect on this individually and as a group. The Exit Point is an excellent chance to engage with parents, guardians and carers and involve them in celebrating the learning that has been achieved.

3.6.The IPC Approach to Assessment for Learning

With its own Assessment for Learning Programme, the IPC provides immediate support for teachers and learners through its comprehensive design and rigour, whilst being flexible enough for each school to adapt the planning and build on their own strengths.

The IPC has been designed to help teachers help children learn effectively and with enjoyment. But it isn't enough to assume that children are learning; we need some way of measuring their gains in learning. This is why the IPC also provides an Assessment for Learning Programme.

This programme supports teachers in assessing, and children in self-assessing, their progress with key skills from the IPC Learning Goals. The programme is broken down into three parts:

- **Teachers' rubrics**: these are essentially, success criteria. They help teachers observe and record the stage at which children are learning in terms of 'beginning', 'developing' and 'mastering' (across the different mileposts).
- **Children's rubrics**: these are child-friendly versions of the above, in age appropriate language, for children to use when self and peer-assessing.
- **Learning advice**: specific learning activities and advice, which can be used in class and shared with parents, that helps children to move from one stage to the next with their learning. This forms the final part of the feedback loop – feeding forwards to next steps and improvements in learning.

To support this programme Fieldwork Education has identified a range of tools provided by assessment providers, on which you can record, track and analyse children's skills progress against the different levels and rubrics, in the different subjects. You can also record comments and observations, monitor progress over time, and collate the evidence into a report to share with parents. Details of the identified assessment providers are available on the MyFieldwork platform.

Using the IPC Assessment for Learning Programme is a skill, like any other, and therefore needs practice by both teachers and children. Brainwave units (in Mileposts 1, 2 and 3) help teachers to introduce the assessment process to children in an age and stage appropriate manner. Opportunities to assess children's skills are embedded into all thematic IPC units of learning.

For more information on successful implementation of this process, please refer to the IPC Assessment for Learning File.

3.7.The IPC's Nine Foundations for Improving Learning

The IPC was designed and continues to be updated with nine underpinning foundations that ensure the curriculum remains learning-focused and puts the goal of improving learning at the centre of what we do. These nine underpinning foundations form the design of the IPC and also the criteria introduced in the IPC's Self-Review and Accreditation process. The IPC's nine foundations for improving learning are:

1) Improving Learning sits central to the IPC, with the curriculum designed around this

Learning should be at the core of what every good school does, and the overarching question the IPC asks is 'How does this improve learning?'

Fieldwork Education has a definition of learning which is based on brain research and this underpins our philosophy about how children learn with the IPC. The Fieldwork Education definition of learning is: "Learning is the process of extending and consolidating our neuronal connections as we acquire knowledge, develop skills and deepen our understandings".

Our definition is a "temporary fixed position", which means we review it regularly as research on the brain deepens our understanding around learning.

2) The IPC's Personal and International Learning Goals create a shared vision about the kinds of people we are helping to develop

Everything a school does should be built upon a shared vision of the kind of person the school is helping to develop, and this vision is underpinned by the IPC Personal and International Learning Goals. Fieldwork Education believes that the eight IPC Personal and the International Learning Goals should be the foundation of a school's shared vision. They are the starting point and some schools may choose to adapt or build on them as they make the IPC Learning Goals relevant to their own school context, and also meaningful and appropriate for different aged children.

The IPC asks the fundamental question which schools need to address is, which is 'What kinds of people are we helping children develop into, both now and in the future?' To support this, Fieldwork Education has provided the below definitions of the Personal Learning Goals.

Personal Learning Goals

Fieldwork Education selected these as we believe children will find them essential for life and learning in the 21st Century. There are eight IPC Personal Goals:

IPC PERSONAL LEARNING GOALS	
Enquiry	■ Be able to ask and consider searching questions related to the area of study ■ Be able to plan and carry out investigations related to these questions ■ Be able to collect reliable evidence from their investigations ■ Be able to use the evidence to draw sustainable conclusions ■ Be able to relate the conclusions to wider issues
Resilience	■ Be able to stick with a task until it is completed ■ Be able to cope with the disappointment they face when they are not successful in their activities ■ Be able to try again when they are not successful in their activities
Morality	■ Know about the moral issues associated with the subjects they study ■ Know about and respect alternative moral standpoints ■ Be able to develop their own moral standpoints ■ Be able to act on their own moral standpoints ■ Be able to explain reasons for their actions
Communication	■ Be able to make their meaning plain using appropriate verbal and non-verbal forms ■ Be able to use a variety of tools and technologies to aid their communication ■ Be able to communicate in more than one spoken language ■ Be able to communicate in a range of different contexts and with a range of different audiences
Thoughtfulness	■ Be able to identify and consider issues raised in their studies ■ Be able to use a range of thinking skills in solving problems ■ Be able to consider and respect alternative points of view ■ Be able to draw conclusions and develop their own reasoned point of view ■ Be able to reflect on what they have learned and its implications for their own lives and the lives of other people ■ Be able to identify their own strengths and weaknesses

	■ Be able to identify and act on ways of developing their strengths and overcoming their weaknesses
Cooperation	■ Understand that different people have different roles to play in groups ■ Be able to adopt different roles dependent on the needs of the group and on the activity ■ Be able to work alongside and in cooperation with others to undertake activities and achieve targets
Respect	■ Know about the varying needs of other people, other living things and the environment ■ Be able to show respect for the needs of other people, other living things and the environment ■ Be able to act in accordance with the needs of other people, other living things and the environment
Adaptability	■ Know about a range of views, cultures and traditions ■ Be able to consider and respect the views, cultures and traditions of other people ■ Be able to cope with unfamiliar situations ■ Be able to approach tasks with confidence ■ Be able to suggest and explore new roles, ideas, and strategies ■ Be able to move between conventional and more fluid forms of thinking ■ Be able to be at ease with themselves in a variety of situations

3) Learning activities in the IPC's units of learning are designed for the teacher to implement their own classroom approaches to achieve the school's shared vision

This underpinning foundation considers how the school's shared vision is brought to life in the classroom through the implementation of thoughtful, planned and documented classroom approaches.

The IPC's units of learning provide careful and explicit linking of the Personal and International Learning Goals with classroom approaches will help schools build consistency and help them explain to others the variety of ways in which learning, and teaching takes place in school.

4) The development of International Mindedness and the International Learning Goals are central to the IPC pedagogy

Fieldwork Education believes in the development of International Mindedness as one of the qualities that is going to be central in the lives of learners throughout the 21st Century and schools

can help develop International Mindedness through giving learners multiple opportunities for International Learning in all lessons.

The IPC embeds International Mindedness for learners, teachers, leaders and the whole school community through the whole curriculum and units of learning, and in all aspects of school life and beyond. Schools should seek to provide multiple opportunities that are purposefully planned for children to demonstrate and deepen their understanding of International Mindedness over time and as they progress throughout the school. Schools are encouraged to seek ways to encourage children to take positive action locally or globally for example protecting and preserving their environment, responding positively to social issues and considering the perspectives of others or the action they may take on a local or a global stage.

At Fieldwork Education, we recently reviewed our temporary fixed position of what it means to be Internationally Minded and when schools implement the IPC and develop their own definition of International Mindedness it should be underpinned by Fieldwork Education's philosophy as a progressive development of:

- A way of being, of thinking and a philosophy;
- Developing a curiosity and interest in the world;
- Developing an increasing sense of self, of others, the community and the world;
- Inspiring and taking positive action and engagement with issues, including health, wellbeing and the environment;
- Understanding of multiple perspectives, including comparisons with other locations; and
- Supporting the development of personal skills and responsibilities to become global citizens.

The IPC defines International Learning Goals that help young children begin the move towards an increasingly sophisticated national, international and global perspectives and develop a sense of International Mindedness.

The International Learning Goals help to equip learners with strategies for the following:

- How they can get along and how they can disagree in a way that is helpful?
- How they can be proud of their own national heritage and culture and, at the same time, deeply respectful of the heritage and culture of others?
- How they can achieve more by coming together than staying apart?

Each thematic IPC unit includes specific tasks related to International as a subject in its own right, as well as encouraging schools to explore the unit from the perspectives of both the '*host*' country and '*home*' country. In some cases, '*host*' and '*home*' will be the same country, so schools will choose at least one other country to explore within a unit of learning. Where appropriate, "*heritage*" or "*adopted*" countries may be used.

- "Home" country is where the child may have been born and/or has cultural roots.
- "Host" is where the child is living now.
- "Heritage" countries are where the child's family originates from.

- "Adopted" countries enhance learning by allowing for comparison to the home/host/heritage country through identifying the similarities and differences between countries.

International Learning is more than the international activity at the end of each unit of learning, it is the rich and varied engagements a school will provide to help children to develop their International Mindedness. Within each unit of learning, schools should seek to explore and engage with global issues, local and community issues.

5) The IPC encourages learners to develop their Knowledge, Skills, and Understanding through the provision of Learning Goals for each type of learning in the IPC's units of learning

Fieldwork Education believes that Knowledge, Skills and Understanding are all significant in the development of children's learning. These three types of learning underpin the IPC Learning Goals which are the foundation of the IPC in all subjects.

We recognise that Knowledge, Skills and Understanding have their own distinct characteristics that impact on how each are learned. It is important that teachers facilitate the learning of each through the ways they are planned for, taught, learned, assessed and reported on.

Each has its own unique characteristics and there is a need to "signpost" these to children, so they know what kind of learning they are experiencing and how these differences impact on their learning.

Our Temporary Fixed Position (TFP) for defining the difference between Knowledge, Skills and Understanding is:

Knowledge

The Fieldwork Education definition of Knowledge as a type of learning refers to remembering factual information.

- Example: Know that plants need water to grow.

Characteristics of Knowledge:

- Knowledge is continually expanding and can change as new discoveries are made.
- Learners can research the Knowledge they have to learn or schools could also expose them to the Knowledge they need to know.
- Knowledge is relatively straightforward to assess through questioning, quizzes, tests, multiple choice, etc.
- The Knowledge content of the IPC units can be adapted to any national curricula requirements.

Skills

The Fieldwork Education definition of Skills as a type of learning refers to things children are able to do.

- Example: Be able to gather information from simple sources.

Characteristics of Skills:

- Skills have to be learned practically and need time to be practiced.
- Skills are also transferable and tend to be more stable than knowledge – this is true for almost all school subjects.
- We define developmental stages of acquiring Skills as 'Beginning, Developing and Mastering'.
- The IPC's Assessment for Learning Programme is based around the assessment of children's Skills.

Understanding

The Fieldwork Education's definition of Understanding as a type of learning refers to the development or 'grasping' of conceptual ideas and making personal meaning.

- Example: Understand how and why people seek to manage and sustain their environment.

Characteristics of Understanding:

- Understanding is personal, and connections have to be made actively by the learner in order to make meaning.
- Multiple opportunities should be offered for learners to develop and demonstrate their Understanding.
- Understanding includes components of Knowledge, Skills and experience.
- Through the learning experiences you provide, understanding is always developing
- Understanding should be evaluated by a judgement of observations carried out over time.

This simple grid is a useful way of looking at how the different types of learning can be experienced and shared with learners, teachers and members of the community.

TYPE OF LEARNING	LEARNING	TEACHING	ASSESSING
Knowledge	Remembering	Exposing	Questioning
Skills	Practicing	Coaching	Observing
Understanding	Reflecting	Facilitating	Evaluating

6) The IPC promotes rigorous children's learning through providing opportunity for differentiation of learning activities and tasks across units of learning that present challenges and choices for learners to engage with

Fieldwork Education ensures a rigorous academic platform that facilitates the learning of Knowledge, Skills and Understanding for subjects by considering and reflecting on a range of standards from all over the world. We believe that schools need to consider rigour carefully and concur with the definition of rigour from the Glossary of Education Reform, stated as: '*experiences that are sufficiently and appropriately challenging for individual children or groups of children.*'

Fieldwork Education believes that rigorous learning experiences motivate children to learn more and learn more deeply, whilst also giving them a sense of personal accomplishment when they overcome a learning challenge, whereas lessons that are simply 'hard' may lead to disengagement, frustration, and discouragement.

We believe rigorous learning involves differentiating tasks for children so that learning can be appropriate and sufficient for each child to make progress over time. We recognise that there should be challenge, and that children should be given a variety of choices when recording and researching through the IPC learning tasks:

- Challenge that allows each child to have the experience of learning something new or consolidating learning, where learning is matched at their appropriate level.
- Choice in Research tasks so they can learn by using the internet, books, field trips, asking questions and the use of experts to name but a few.
- Choice in Record tasks so that they can show their learning by a variety of ways such as a written report, a PowerPoint presentation, a puppet show, or a diagram.

We know that learning-focused teachers use feedback from the children's' learning to plan next steps for appropriate challenge and support where needed. These teachers recognise the different learners in their class and plan differentiated tasks accordingly to maximize learning and promote positive engagement from the learners. They will recognise the importance of the children's voice in displays, allowing for their individual learning to be acknowledged and recognised.

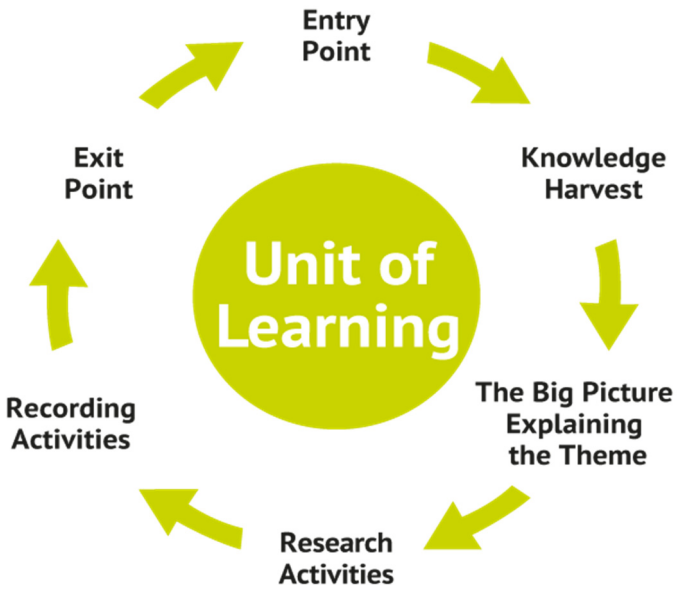
Schools that are learning-focused and have an emphasis on rigour, create systems and structures to support rigorous learning to take place. This could include regular work scrutiny, marking/feedback policy, learning walks, internal moderation, and classroom visits to ensure the learning is appropriate and sufficiently challenging for all learners.

7) The IPC Learning Process improves learning

It is important that learners, teachers and leaders understand why they use the IPC Learning Process and why they are learning in this way. This is to be shared with members of the community, so they can support their child at home.

As referenced in Chapter 3.5, the IPC Learning Process is a central part of the IPC. It is important that the IPC Learning Process is visible in every classroom, with the unit title clearly visible and signposting where the learners are in the Learning Process. This can support children in talking about the process, knowing where they are in the process, and knowing the next stage of the process.

The IPC Learning Process



8) The IPC uses themes that link independent yet interdependent subjects

The IPC is based on the study of units of learning around a theme. There are many exciting, engaging and globally relevant units of learning to choose from. Within units of learning, Fieldwork Education believes that it is important for learners to be introduced to a number of subjects – Art, Science, History, Geography, ICT and Computing, Technology, Society, World Languages, Music, Physical Education, Mathematics and Language Arts in Primary school so that they can begin to understand the world around them.

Each of these subjects has its own set of IPC Learning Goals, and it is important that children recognise the subjects as being independent and distinctive and yet interdependent. Teachers (including single subject specialists) need to help children develop the connections between the subjects. Additionally, teachers should consider in their planning where learning can be enhanced by making explicit links with Language Arts and Mathematics, where there are no Research or Recording tasks.

Research has informed us that the brain learns by forming connections between brain cells (neurons) related to a particular concept or idea. This is sometimes referred to by neuroscientists

and psychologists as the 'chunking' of information. Neuroscientists suggest that the brain learns 'associatively', always looking for patterns and linking to previous learning, so by engaging children in learning through themes it will make retrieval more likely.

The online Route Planner (available through MyFieldwork) helps schools to plan which IPC units they would like to teach and track the coverage of the Learning Goals in each subject within the units, to ensure a broad and balanced curriculum.

A full set of IPC Subject Learning Goals can be found in Appendix A on pages 23-60.

9) The IPC views Assessment and Evaluation as tools for improving learning

To be a learning-focused curriculum is also to be a curriculum focused on assessment that improves learning. This type of assessment is integral in the way in which we find out whether the learner has learned what was planned for them to learn and is essential to be able to plan for their next stage of learning.

Fieldwork Education believes that Knowledge and Skills can be assessed, and that Understanding should be evaluated. Therefore, schools are expected to use the IPC Assessment for Learning Programme (referred to in chapter 3.6) for assessing Skills and are expected to develop their own assessments for Knowledge and to evaluate Understanding.

Learning and assessment work together; the purpose of assessment is to guide next steps and improve future learning. The IPC Learning Goals distinguish between three types of learning; Knowledge, Skills and Understanding. Fieldwork Education believes that all three need to be assessed and evaluated appropriately in order to get a rounded picture of children's learning. Schools need to consider and plan for how they are going to assess and evaluate the IPC Learning Goals, recognizing the differences between Knowledge, Skills and Understanding and how they are assessed and evaluated.

Key for assessment and evaluation that improves learning is for the learner to be able to talk about what they have learned and how they can take the next steps towards improvement, this is based on the feedback and marking from the teacher. The Assessment for Learning programme supports teachers in assessing, and children in self-assessing, their progress with key skills from the IPC Learning Goals. The programme is broken down into three parts which need to be used to define the next steps forward for learners and to help improve learning. Critical to each of these three parts is the definition of the measurements for progression for learners.

Fieldwork Education has established a staged progression of Beginning, Developing and Mastering. Each of these is a description of a stage that the school currently occupies. Each is also capable of development. Mastering is not 'mastered'; it does not imply that everything is perfect.

The three parts of the Assessment for Learning Programme include teacher rubrics, children's rubrics and learning advice, which are explained in chapter 3.6.

Evaluation of Understanding: the 'understand' Learning Goals can be evaluated throughout the units of learning. Understanding is personal, and connections have to be made actively by the learner in order to make meaning. Multiple opportunities should be offered for learners to develop and demonstrate their Understanding, which includes components of Knowledge, Skills and experience.

We think that learners should be given opportunities to transfer their Understanding, to demonstrate, develop and deepen Understanding through explanation, application, self-reflection, interpretation and the understanding and empathizing with multiple viewpoints.

Multiple opportunities for learners to demonstrate their Understanding of the Subject, Personal and International Learning Goals should be offered throughout the unit. The demonstration of Understanding can take different forms, such as: end of subject and unit reflections, reflective discussions, transfer between home and school, reflective journals, as well as Exit Points. Exit Points as the celebration of learning may take many forms such as a presentation, an exhibition, posters or a show.

For more information on the successful implementation of this process, please refer to the IPC Assessment for Learning File.

Using these foundations will guide your practice and delivery of the IPC in your school. More information about implementation of the IPC can be found in the IPC Implementation Guide. Further details of each of the nine foundations can be found in the Self-Review and Accreditation Guide.

4. Getting started with the IPC

Guidance on key steps for introducing the IPC in a school

4.1.Using the IPC Implementation Guide

The IPC Implementation Guide will help you to get started with the IPC in your school, and subsequently review it. This document can be used by both teachers and leaders during the implementation process and contains the following contents:

1. Introducing Fieldwork Education
2. Curriculum documentation overview
3. Introduction to the Implementation Guide for the IPC
4. The Curriculum Guide for the IPC
5. The Role of the IPC Leader
6. Recommendations for Implementation
7. Implementing the IPC in your school
8. Teaching and Leading the IPC
9. Appendices

References are made to other documents in this guide, all of which are available on MyFieldwork.

4.2.Professional Learning

Fieldwork Education offers opportunities for Professional Learning for the IPC at different levels, which are available face-to-face and online for various roles within a school. Details on the Professional Learning courses for the IPC are available on FieldworkEducation.com and the MyFieldwork platform, under Professional Learning, with an annual catalogue of Professional Learning courses provided by Fieldwork Education each year. The course titles and who these are advised as applicable for are provided below:

- **Level 1: Launching the IPC**
  Suitable for: Leaders and Administrators
- **Level 1: Implementing the IPC**
  Suitable for: Teachers and Leaders
- **Level 2: Embedding the IPC**
  Suitable for: Teachers and Leaders
- **Level 2: Leading the IPC**
  Suitable for: Leaders and Administrators
- **Level 2: Improving Learning Through Self-Review**
  Suitable for: Teachers and Leaders
- **Level 2: Accelerating to Accreditation**
  Suitable for: Leaders and Administrators
- **Level 2: Identifying, Assessing and Improving Children's Learning**
  Suitable for: Teachers and Leaders

- **Level 3: Evolving the IPC**
  Suitable for: Teachers and Leaders

4.3.Self-Review and Accreditation

Fieldwork Education have developed a Self-Review and Accreditation process for schools to ensure that they are improving learning with the IPC and to provide an external validation of the quality of their IPC implementation through the Fieldwork Education Accreditation. The benefits of the IPC's Self-Review and Accreditation process have been widely recognised around the world as delivering improved learning opportunities for learners, their schools and their communities.

The Self-Review involves using the rubrics that are inside the Self-Review and Accreditation Guide to reflect on a school's current implementation of the IPC. The rubrics align to the IPC's nine underpinning foundations, defining a set of criteria for each and schools gather evidence under each one of these criteria. The two main stages of the Self-Review and Accreditation process are:

- **Pre-accreditation**

A Pre-Accreditation visit will be planned whereby a Pre-Accreditation team-member will visit your school for one day (sometimes longer for a bigger school or for more than one curriculum). Many schools arrange for a bespoke day of training for the day following the visit, which is organised around the needs of the school.

- **Accreditation**

The Accreditation visit is usually arranged for between 9 months and two years after the Pre-Accreditation visit. The accreditation team as a minimum will be made up of an accreditation leader and an accreditation team member and will last a minimum of four days. To prepare for the Accreditation visit, schools must complete an Improving Learning Portfolio which includes the self-review report and where evidence will be stored for the visiting team to view. The school will receive their Accreditation report 4-6 weeks after the visit which will notify them of whether they will be accredited and include findings that celebrate the learning that was visible during the visit and include Improving Learning Recommendations for the school to further improve.

Appendix A: IPC Learning Goals

Art

Introduction

In Art, children learn about visual and tactile expression and communication. They should be taught about:

- Expressing ideas, emotions, observations and experiences in images
- Developing creativity and imagination
- Using colour, form, texture and patterns
- Using materials and processes
- Understanding, appreciating, respecting and enjoying other people's visual expressions
- The work of artists, craftspeople and designers from different cultures, including those represented in the host country
- Functions of the visual arts in people's lives now and in the past

The Knowledge, Skills and Understanding which children gain through their study of Art can be regarded in terms of:

- Enquiry
- Designing
- Making
- Techniques
- Materials
- Interpretation
- Evaluation
- Communication

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know about some of the forms used by artists in their work
1.2. Be able to use a variety of materials and processes
1.3. Be able to suggest ways of improving their own work
1.4. Be able to comment on works of art
1.5. Understand that the work of artists can be seen in a wide variety of places and situations

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know how a number of artists – including some from their home country and the host country – use forms, materials and processes to suit their purpose

2.2. Know about some of the work of artists in the host country
2.3. Be able to use art as a means of self-expression
2.4. Be able to choose materials and techniques which are appropriate for their task
2.5. Be able to explain their own work in terms of what they have done and why
2.6. Be able to talk about works of art, giving reasons for their opinions

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of art is concerned with visual and tactile expression and communication
3.2. Know how artists, craftspeople and designers from a variety of traditions – including those of their home country and the host country – use materials, forms and techniques to express their emotions, observations and experiences
3.3. Be able to use a wide variety of materials, forms and techniques to express their emotions, observations and experiences
3.4. Be able to communicate through visual and tactile forms
3.5. Be able to improve their own work
3.6. Be able to make judgements about works of art, showing understanding, appreciation, respect and enjoyment as appropriate
3.7. Be able to consider works of art in terms of meaning, design, materials, technique, place and time
3.8. Understand that the work of artists is influenced by their environment and that artists have an effect on the environment

Geography

Introduction

In Geography, children learn about places and environments in the world around them. They should be taught about:

- Ways of finding out about places and environments
- Environmental issues
- Interpreting geographical information
- How places and environments are affected by natural processes and human activities
- The characteristics of natural features and processes
- How people have organised their physical environment
- The diversity of human activities – including economic, social, political and cultural
- Similarities and differences between places and environments
- How their own lives, and those of other people, are affected by geographical and environmental factors
- How nations affect each other
- Causes and effects
- The use of maps, atlases and globes
- The geography of the host country

The Knowledge, Skills and Understanding which children gain through their study of Geography can be regarded in terms of:

- Enquiry
- Places
- Environmental change and development
- Geographical features
- Mapping
- Communicating

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know about the main physical and human features of particular localities
1.2. Know about similarities and differences between different localities
1.3. Know about how land and buildings are used in particular localities
1.4. Know about the weather and climatic conditions in particular localities and how they affect the environment and the lives of people living there
1.5. Know that the world extends beyond their own locality and that the places they study exist within a broader geographical context
1.6. Know that people can harm or improve the environment
1.7. Be able to use geographical terms
1.8. Be able to follow directions

1.9. Be able to describe the geographical features of the school site and other familiar places
1.10. Be able to make maps and plans of real and imaginary places, using pictures and symbols
1.11. Be able to use maps at a variety of scales to locate the position and simple geographical features of the host country and their home country
1.12. Be able to use secondary sources to obtain simple geographical information
1.13. Be able to express views on the attractive and unattractive features of an environment
1.14. Be able to communicate their geographical knowledge and understanding in a variety of ways

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know how particular localities have been affected by human activities
2.2. Know how particular localities have been affected by natural features and processes
2.3. Know how the nature of particular localities affect the lives of people
2.4. Know about the weather and climatic conditions in the host country and how they affect the environment and the lives of people living there
2.5. Be able to use geographical terms
2.6. Be able to describe the main geographical features of the area immediately surrounding the school
2.7. Be able to make simple maps and plans of familiar locations
2.8. Be able to use maps at a variety of scales to locate the position and geographical features of particular localities
2.9. Be able to use secondary sources to obtain geographical information
2.10. Be able to express views on the features of an environment and the way it is being harmed or improved
2.11. Be able to communicate their geographical knowledge and understanding to ask and answer questions about geographical and environmental features
2.12. Understand how places fit into a wider geographical context
2.13. Understand that the quality of the environment can be sustained and improved

Milepost 3

By the age of 12, the vast majority of children will:

3.1. Know that the study of geography is concerned with places and environments in the world around them
3.2. Know about the main physical and human features and environmental issues in particular localities
3.3. Know about similarities and differences between particular localities
3.4. Know how the features of particular localities influence the nature of human activities within them

3.5. Know about recent and proposed changes in particular localities
3.6. Know about the major geographical features of the host country
3.7. Know about the geography of the area around the school
3.8. Know about the major geographical features of their home country
3.9. Know about the weather and climatic conditions in their home country and how they affect the environment and the lives of people living there
3.10. Know about the weather and climatic conditions in the host country and how they affect the environment and the lives of people living there
3.11. Know how people affect the environment
3.12. Be able to enquire into geographical factors and their effects on people's lives
3.13. Be able to use a variety of sources to gather geographical information
3.14. Be able to collect and record evidence to answer geographical questions
3.15. Be able to identify geographical patterns and to use their knowledge and understanding to explain them
3.16. Be able to use appropriate geographical vocabulary to describe and interpret their surroundings
3.17. Be able to use instruments to make measurements
3.18. Be able to use appropriate techniques to gather information
3.19. Be able to make plans and maps in a variety of scales using symbols and keys
3.20. Be able to use and interpret globes and maps in a variety of scales
3.21. Be able to use maps in a variety of scales to locate the position and geographical features of the host country and town, their home country and town, other countries and towns in which they and their peers have lived
3.22. Be able to explain how physical and human processes lead to similarities and differences between places
3.23. Be able to explain how places are linked through movement of goods and people
3.24. Be able to communicate their knowledge and understanding of geography in a variety of ways
3.25. Understand how localities are affected by natural features and processes
3.26. Understand how and why people seek to manage and sustain their environment
3.27. Understand how the geographical features of the host country affect the lives of the people who live there

History

Introduction

In History, children learn about the past in relation to the present. They should be taught about:

- Ways of finding out about the past
- The ways in which the past has been recorded and interpreted
- How to draw conclusions about the past
- The lives of people in the past
- Cultural, political, social, economic and personal aspects of past societies
- The ways in which past societies have affected each other
- The present being a result of what people have done in the past
- How their own lives are affected by historical influences
- Similarities and differences between the past and the present
- Continuity and change in their own lives and in the history of peoples
- Causes and effects
- Ways of presenting their work
- The history of the host country

The knowledge, skills and understanding which children gain through their study of History can be regarded in terms of:

- Enquiry
- Knowledge
- Interpretation
- Chronology
- Communicating

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know stories about a range of people who have lived in a variety of cultures in the past
1.2. Know about a range of events that have happened in the past
1.3. Be able to ask and answer questions about the past
1.4. Be able to use key words and phrases relating to the passing of time
1.5. Be able to order events and objects into a sequence
1.6. Be able to identify differences between their own lives and those of people who have lived in the past
1.7. Be able to find out about aspects of the past from a range of sources of information
1.8. Be able to communicate their historical knowledge and understanding in a variety of ways
1.9. Understand that events and people's actions have causes and effects

1.10. Understand that the past is represented in a variety of ways

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know about the main events, dates and characteristics of the past societies they have studied
2.2. Know about the lives of people in those periods
2.3. Know about the main similarities and differences between the past societies they have studied
2.4. Be able to give some reasons for particular events and changes
2.5. Be able to gather information from simple sources
2.6. Be able to use their knowledge and understanding to answer simple questions about the past and about changes
2.7. Understand that the past can be considered in terms of different time periods
2.8. Understand that the past has been recorded in a variety of different ways

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of history is concerned with the past in relation to the present
3.2. Know about the characteristic features of particular periods and societies
3.3. Know about the general history of the host country
3.4. Know about the general history of their home country
3.5. Know about the characteristic features of a particular period in the history of the host country
3.6. Know about the ideas, beliefs, attitudes and experiences of people in the past
3.7. Know about the social, cultural, religious and ethnic diversity of the periods studied
3.8. Know the terms associated with the periods they have studied
3.9. Be able to enquire into historical issues and their effects on people's lives
3.10. Be able to find out about aspects of the past from a range of sources
3.11. Be able to describe and identify reasons for and results of historical events, situations, and changes in the periods they have studied
3.12. Be able to describe and make links between the main events, situations and changes both within and across periods
3.13. Be able to describe how the history of the host country affects the lives of people who live there now
3.14. Be able to describe how the history of one country affects that of another
3.15. Be able to ask and answer questions about the past
3.16. Be able to select and record information relevant to an historical topic
3.17. Be able to place the events, people and changes in the periods they have studied into a chronological framework
3.18. Be able to use dates and terms relating to the passing of time
3.19. Be able to communicate their Knowledge and Understanding of history in a variety of ways, making appropriate use of dates and historical terms

3.20. Understand how some aspects of the past have been represented and interpreted in different ways
3.21. Understand that historical sources can be different from and contradict one another and that they reflect their context of time, place and viewpoint

ICT

Introduction

In ICT, children learn about applying technology in order to gather, use and exchange information. They should be taught about:

- Ways of gathering, investigating, analysing, communicating and presenting information
- Making the best use of available resources
- Making the best use of available information
- Ways in which ICT affects people's lives

The Knowledge, Skills and Understanding which children gain through their study of information and communication technology can be regarded in terms of:

- Enquiry
- Information
- Skills
- Communication
- Evaluation

The goals in information and communication technology will normally be achieved through children's work in other subjects.

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know about some of the applications of ICT in everyday life
1.2. Know about some of the ways in which the use of ICT affects people's lives
1.3. Be able to use ICT to organise and classify information
1.4. Be able to use ICT to present information
1.5. Be able to enter, save, retrieve and revise information
1.6. Be able to work with text, tables, images and sound
1.7. Be able to plan and give instructions to make things happen
1.8. Be able to describe what they have done
1.9. Be able to use ICT to explore what happens in real and imaginary situations

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know about some applications of ICT in work situations
2.2. Know about some applications of ICT in daily life
2.3. Know about some of the ways in which the use of ICT in work situations affects people's lives
2.4. Be able to find and use stored information from a variety of sources
2.5. Be able to use ICT to support and present their work in other subjects

2.6. Be able to use sequences of instruction to control devices and achieve specific outcomes
2.7. Be able to make choices to gather information and solve problems
2.8. Understand that ICT can be used responsibly and creatively to people's benefit

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of ICT is concerned with applying technology to gather, use and exchange information
3.2. Know about an increasing number of applications of ICT for leisure, communication and work
3.3. Be able to frame questions appropriately when gathering and interrogating information
3.4. Be able to interpret their findings
3.5. Be able to identify whether their findings are valid
3.6. Be able to manipulate and combine different forms of information from different sources
3.7. Be able to use ICT to present information in a variety of forms
3.8. Be able to exchange information and ideas in a number of different ways
3.9. Be able to use ICT to control events
3.10. Be able to use ICT to sense physical data
3.11. Be able to use ICT-based models and simulations
3.12. Understand that the quality of information affects the results of any enquiry
3.13. Understand the importance of considering audience and purpose when presenting information

Language Arts

Introduction

In Language Arts, children learn about the nature and use of the language of instruction. They should be taught about:

- The skills which help them to use the language effectively
- The meaning, use and form of language
- Enjoyment and appreciation of language

The Knowledge, Skills and Understanding which children gain through their study of language arts can be regarded in terms of:

- Speaking and listening
- Reading
- Writing
- Language awareness
- Drama

Activities in the units of work of the International Primary Curriculum provide plenty of opportunity for children to develop their use of language. They do not, however, constitute a programme for language study. Schools have told us that they would prefer to use their own published or self-created programmes of work to help children reach the learning goals defined under 'Language awareness'.

Milepost 1

Speaking and listening

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to make contributions to class and group discussions
1.2. Be able to ask and respond to questions
1.3. Be able to follow the conventions of conversation
1.4. Be able to give consideration to the needs of the listener
1.5. Be able to give and respond to oral directions
1.6. Be able to recite and respond to familiar stories, poems and rhymes

Reading

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to express opinions about major events, ideas and characters in what they read
1.2. Be able to summarise and retell what they have read
1.3. Be able to read familiar passages aloud with fluency and expression
1.4. Be able to recognise the main features of what they read

Writing

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to make simple plans of what they are going to write
1.2. Be able to use strategies to organise their writing
1.3. Be able to use writing to describe familiar persons, places, objects and experiences
1.4. Be able to use writing to convey simple ideas
1.5. Be able to write in both narrative and non-narrative form
1.6. Be able to give consideration to the needs of the reader
1.7. Be able to write with letters that are accurately formed and consistent in size

Language awareness

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know the basic elements of phonetic analysis in reading
1.2. Know the basic structure elements of word structure
1.3. Know the names of simple punctuation marks
1.4. Know the names of basic parts of speech
1.5. Be able to recognise and use complete sentences
1.6. Be able to use simple punctuation
1.7. Be able to recognise and use nouns, verbs, adjectives and adverbs
1.8. Be able to use conventions of spelling so that monosyllabic words are usually spelt accurately
1.9. Be able to use a variety of strategies and cues to interpret the meaning of simple texts
1.10. Be able to use a variety of strategies and cues to read unfamiliar words
1.11. Be able to recognise familiar words on sight
1.12. Understand that there may be differences between spoken and written forms used in school and those used elsewhere

Drama

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to adopt a role
1.2. Be able to make simple dramatic presentations to others
1.3. Be able to respond to performances by identifying what they liked or disliked and giving simple reasons

Milepost 2

Speaking and listening

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to make positive and sustained contributions to group discussion
2.2. Be able to make reasoned responses to questions and comments
2.3. Be able to listen to others without making interruptions

2.4. Be able to use strategies to convey a clear main point when speaking
2.5. Be able to plan simple oral presentations
2.6. Be able to make simple oral presentations
2.7. Be able to recognise and use simple non-verbal expressions
2.8. Be able to identify the main points of an oral presentation
2.9. Be able to summarise and recount the main points of an oral presentation

Reading

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to use strategies for previewing text
2.2. Be able to identify a writer's purpose
2.3. Be able to identify a writer's opinion
2.4. Be able to select suitable reading material
2.5. Be able to read texts written in a range of forms
2.6. Be able to make inferences and draw conclusions about the qualities and actions of characters in what they read
2.7. Be able to summarise and paraphrase what they have read

Writing

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to plan their writing
2.2. Be able to draft and revise their writing
2.3. Be able to evaluate their own writing
2.4. Be able to write for different purposes and readers
2.5. Be able to write in different forms
2.6. Be able to write with a structure suited to their purpose
2.7. Be able to write in response to events, people, ideas and things they have read
2.8. Be able to write in support of an opinion or argument

Language awareness

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know that language is used differently in different situations
2.2. Know that the way language is used can reflect different cultures
2.3. Know the key elements of structures commonly used in writing
2.4. Know the names of a range of parts of speech
2.5. Know the names of a range of punctuation marks
2.6. Know the main characteristics of a range of written forms
2.7. Know the main features and conventions commonly used in written texts
2.8. Be able to recognise and use a range of parts of speech
2.9. Be able to use the conventions of spelling so that familiar words are spelt accurately
2.10. Be able to use a range of punctuation marks
2.11. Be able to make and check predictions about what will be found in a text

2.12. Be able to use reference materials to determine the meaning and pronunciation of unknown words
2.13. Be able to use the main features and conventions commonly used in written texts
2.14. Be able to recognise common devices used by writers
2.15. Understand that there are different purposes for the use of language

Drama

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to create, adapt, sustain and respond to roles
2.2. Be able to use character, action and story in plays they improvise and script
2.3. Be able to use dramatic techniques to explore characters and issues
2.4. Be able to respond to a performance by commenting on characters, story and effects

Milepost 3

Speaking and listening

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to play a variety of roles in group discussions
3.2. Be able to ask questions to obtain clarification and elaboration
3.3. Be able to use strategies and tools to enhance listening comprehension
3.4. Be able to use the content, intention and perspective of what is said to them in a variety of situations
3.5. Be able to convey information, experiences, arguments and opinions clearly when speaking to others
3.6. Be able to use appropriate vocabulary in speech
3.7. Be able to use strategies and tools for making oral presentations
3.8. Be able to use spoken language that is appropriate to the situation and purpose

Reading

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to read for different purposes
3.2. Be able to use a variety of strategies to understand meaning
3.3. Be able to make inferences and draw conclusions from what they read
3.4. Be able to retrieve information and ideas from a range of written texts
3.5. Be able to distinguish between fact and fiction

Writing

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to use a range of strategies to write for different readers
3.2. Be able to use a range of strategies to write for different purposes

3.3. Be able to write in a range of different forms appropriate for their purpose and readers
3.4. Be able to write texts that clearly describe their own experiences, feelings, opinions, arguments, appreciation or disapproval
3.5. Be able to write about what they have learned from a variety of sources
3.6. Be able to use writing to organise thoughts, experiences, emotions and intentions for themselves
3.7. Be able to use a range of strategies and tools for planning, drafting and revising their writing
3.8. Be able to write neatly and legibly

Language awareness

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know rules for grammatical construction
3.2. Know rules for spelling
3.3. Know rules for punctuation
3.4. Be able to recognise devices used by an author to accomplish a purpose
3.5. Be able to recognise different forms, genres and themes
3.6. Be able to explain and describe the main features, ideas, themes, events, information and characters in a text
3.7. Be able to recognise and use figures of speech
3.8. Be able to recognise and use descriptive language
3.9. Be able to recognise and use literal language
3.10. Be able to recognise and use different forms, styles and genres
3.11. Be able to recognise and use different linguistic conventions
3.12. Understand that language is used differently in different situations
3.13. Understand that language and the way it is used affects the relationships between people
3.14. Understand that there are cultural differences between the way that language is used by different people and in different situations
3.15. Understand that the meaning of language can be influenced by the situation, form, unexpressed intentions, physical posture, facial expression and gestures
3.16. Understand that forms of communication benefit from the application of rules

Drama

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to improvise a play, using roles, situation and elements of a story
3.2. Be able to perform a scripted play
3.3. Be able to make use of voice, language, posture, movement and facial expression
3.4. Be able to make use of scenery, stage properties, costume and make-up
3.5. Be able to evaluate their own performance and that of others
3.6. Be able to respond to a performance identifying the key elements and devices

Mathematics

Introduction

In Mathematics, children learn about the nature and use of mathematical ideas and skills. They should be taught about:

- Connections between what they learn and their everyday existence
- Basic mathematical skills
- Mathematical language
- Applying what they learn to practical situations
- Reflecting on their own mathematical activities and checking the accuracy of their results
- Recognising and using relationships, rules, patterns and structures
- Describing strategies of investigation and reasoning in their own words

The Knowledge, Skills and Understanding which children gain through their study of Mathematics can be regarded in terms of:

- Using mathematics
- Number
- Measurement
- Shape and space
- Data handling

Units of work for the International Primary Curriculum describe what and how children in different age groups are expected to learn in their mathematical development. They do not, however, constitute a programme for mathematical study.

Milepost 1

Using mathematics

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to draw pictures and use apparatus and symbols to represent problems
1.2. Be able to discuss mathematical problems, processes and solutions with teachers, and other children
1.3. Be able to choose between addition and subtraction to solve mathematical problems
1.4. Be able to use simple apparatus to solve mathematical problems
1.5. Be able to use their mathematical Knowledge, Skills and Understanding in everyday situations

Number

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to count to 100
1.2. Be able to recognise symbolic, concrete and pictorial representations of numbers
1.3. Be able to use mental recall of addition and subtraction facts to 10
1.4. Be able to use mental calculation to solve number problems involving money and measurement
1.5. Be able to identify simple sequences of numbers
1.6. Be able to add and subtract whole numbers
1.7. Be able to solve problems using addition and subtraction
1.8. Understand the inverse relationship between addition and subtraction
1.9. Understand that numerals are symbols used to represent quantities
1.10. Understand the place value of each digit in numbers to 100

Measurement

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know standard units used for the measurement of length, turn, mass, time and temperature
1.2. Be able to use standard and non-standard units to measure length, turn, mass, time and temperature
1.3. Be able to estimate measurements of length, turn, mass, time and temperature and to check their estimates against actual measurement

Shape and space

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know the mathematical names for common two- and three-dimensional shapes
1.2. Know the properties of common two- and three-dimensional shapes
1.3. Be able to use and understand the common language of spatial sense
1.4. Understand that geometrical shapes are useful for representing real situations

Data handling

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Be able to sort and classify objects using two or more criteria
1.2. Be able to gather information and record it using simple lists, tables and charts
1.3. Understand that they can find out about a group of things by investigating just some of them

Milepost 2

Using mathematics

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to use a variety of strategies for understanding and solving problems
2.2. Be able to represent problems, processes and solutions in a variety of forms
2.3. Be able to use trial and error and the process of elimination to solve problems
2.4. Be able to explain the methods and reasoning they have used in solving a problem
2.5. Be able to organise their work in a coherent way
2.6. Be able to check their results
2.7. Be able to use and interpret mathematical symbols and diagrams
2.8. Be able to identify particular examples to support a general statement
2.9. Be able to use their mathematical Knowledge, Skills and Understanding in everyday situations

Number

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Understand place value in numbers up to 1000
2.2. Be able to use and recognise decimal notation in measurement
2.3. Be able to use mental recall of addition and subtraction facts up to 20
2.4. Be able to use mental recall of multiplication tables, and their associated division facts, up to 10x10
2.5. Be able to use written methods to add and subtract three-digit numbers
2.6. Be able to use written methods to multiply and divide two numbers
2.7. Be able to record a remainder in a division sum
2.8. Be able to use simple fractions
2.9. Be able to recognise simple equivalent fractions

Measurement

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to use standard and non-standard units to measure length, turn, mass, time and temperature in a range of contexts
2.2. Be able to select and use appropriate units of measurement
2.3. Be able to select and use appropriate instruments for measurement
2.4. Be able to use strategies to estimate measurements

Shape and space

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know the names and properties of range of two- and three-dimensional shapes
2.2. Know the characteristics of particular lines and angles
2.3. Be able to classify two- and three-dimensional shapes according to their properties

2.4. Understand that shapes can be congruent or similar
2.5. Understand that scale is used to show relative size and distance

Data handling

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to extract and interpret information presented in simple tables and lists
2.2. Be able to gather information and present it in bar charts, pictograms and line graphs
2.3. Understand that some events are more likely to happen than others

Milepost 3

Using mathematics

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to solve mathematical problems both within mathematics and in other practical contexts
3.2. Be able to break a complex problem into simpler parts
3.3. Be able to use their experience of similar situations in solving problems
3.4. Be able to use their own strategies for solving problems
3.5. Be able to generalise from particular cases, using conjecture and supporting arguments
3.6. Be able to record and explain their work clearly and accurately in a variety of forms
3.7. Be able to convert into mathematical terms a simple problem not described in mathematical language
3.8. Be able to use their mathematical Knowledge, Skills and Understanding in everyday situations
3.9. Understand that there is no one right way to solve any mathematical problem

Number

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to add, subtract, multiply and divide whole numbers, fractions and decimals
3.2. Be able to use a range of strategies for mental tasks involving addition, subtraction, multiplication and division
3.3. Be able to record accurately their calculations in addition, subtraction, short and long multiplication and short and long division
3.4. Be able to add, subtract, multiply and divide decimals to two places
3.5. Be able to compare ratios
3.6. Be able to solve simple ratio problems
3.7. Be able to calculate simple percentages

3.8. Be able to convert fractions into decimal fractions
3.9. Be able to use a calculator accurately for the addition, subtraction, multiplication and division of whole numbers, decimal fractions and percentages
3.10. Be able to check their work by inverse calculations, estimation and approximation
3.11. Be able to recognise and use number patterns and relationships including multiples, factors, squared and cubed numbers and square roots
3.12. Be able to construct and use simple formulae involving one or two operations
3.13. Be able to interpret and use coordinates
3.14. Understand the relationships between ratios, fractions, decimal fractions and percentages

Measurement

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know the units of measurement for length, area, turn, volume, capacity, time, speed, mass and temperature
3.2. Know the formulae for finding the perimeters and areas of rectangles and for calculating simple volumes
3.3. Be able to tell the time and calculate time intervals
3.4. Be able to perform calculations with money – including with the currency of their home and host countries
3.5. Be able to use these units of measurement accurately in practical situations
3.6. Be able to use appropriate instruments of measurement
3.7. Be able to find the perimeters and areas of various shapes
3.8. Understand the principles of drawing to scale
3.9. Understand the relationships between different units of measurement

Shape and space

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know the defining properties of regular geometrical shapes
3.2. Know the defining properties of regular three-dimensional shapes
3.3. Be able to draw angles to the nearest degree
3.4. Be able to identify the lines of symmetry of two-dimensional shapes
3.5. Be able to draw common two-dimensional shapes accurately and to scale
3.6. Be able to construct three-dimensional models accurately and to scale

Data handling

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Be able to collect and record data using appropriate tables, graphs and diagrams, using ICT where appropriate
3.2. Be able to interpret and draw conclusions from tables, graphs and diagrams
3.3. Be able to calculate basic probability through simple experiments
3.4. Be able to gather information to make predictions about events
3.5. Understand the basic concepts of mean, average, range, frequency and distribution

3.6. Understand the relationship between events that are sure to happen, sure not to happen, likely to happen and unlikely to happen

Music

Introduction

In Music, children learn about musical expression and communication. They should be taught about:

- Expressing emotions and experiences in images
- Developing creativity and imagination
- Performing by singing and playing instruments
- Musical composition
- Appreciating, respecting and enjoying musical compositions and performances
- The work of musicians from different cultures, including those represented in the host country
- Functions of music in people's lives now and, in the past

The Knowledge, Skills and Understanding which children gain through their study of Music can be regarded in terms of:

- Enquiry
- Performance
- Composition
- Listening
- Interpretation
- Evaluation
- Communication

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know a number of songs
1.2. Know a number of other pieces of music
1.3. Know how a number of musicians – including some from their home country and the host country – use musical elements to create different effects and for different purposes
1.4. Be able to recognise and explore ways in which sounds can be made, changed and organised
1.5. Be able to sing familiar songs
1.6. Be able to play simple rhythms with a steady beat
1.7. Be able to compose simple musical patterns
1.8. Be able to perform individually and with others
1.9. Be able to use symbols to represent sounds
1.10. Be able to listen carefully to pieces of music and comment on them
1.11. Be able to recall a simple tune
1.12. Be able to suggest ways of improving their own work

1.13. Understand that musical elements can be used to create different effects
1.14. Understand that music is used for a variety of different purposes

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know how a number of musicians – including some from their home country and the host country – organise sounds and use them expressively
2.2. Know how a number of musicians – including some from their home country and the host country – choose sounds and instruments which are appropriate for their task
2.3. Be able to recognise and explore the ways that sounds can be organised and used expressively
2.4. Be able to sing in tune and with expression
2.5. Be able to perform simple pieces rhythmically using a limited range of notes
2.6. Be able to improvise repeated patterns
2.7. Be able to compose simple pieces to create intended effects
2.8. Be able to choose sounds and instruments which are appropriate for their task
2.9. Be able to improve their own work, having regard to the intended effect
2.10. Be able to explain their own work in terms of what they have done and why
2.11. Be able to talk about pieces of music, giving reasons for their opinions
2.12. Be able to recognise and identify familiar pieces of music including some from the host country
2.13. Understand how musical elements are combined and varied to create different effects

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of music is concerned with musical expression and communication
3.2. Know how a number of musicians – including some from their home country and the host country – combine musical elements within a structure
3.3. Be able to sing songs in unison and in two parts
3.4. Be able to play tuned and untuned instruments with control and rhythmical accuracy
3.5. Be able to perform as part of an ensemble
3.6. Be able to perform with an awareness of audience
3.7. Be able to compose musical pieces combining musical elements within a structure
3.8. Be able to improve their own work having regard to purpose
3.9. Be able to listen attentively with attention to detail
3.10. Be able to make judgements about pieces of music, showing understanding, appreciation, respect and enjoyment as appropriate
3.11. Be able to consider pieces of music in terms of meaning, mood, structure, place and time
3.12. Understand that musicians use music to express emotions and experiences

3.13. Understand that the work of musicians is influenced by their environment

Physical Education

Introduction

In Physical Education, children learn about healthy lifestyles and performing a range of movement activities. They should be taught about:

- Developing physical competence and confidence
- Developing creativity and imagination
- A range of activities
- A range of skills
- Physical development
- Healthy lifestyles
- Teamwork
- Communication

The Knowledge, Skills and Understanding which children gain through their study of Physical Education can be regarded in terms of:

- Skills
- Planning
- Performance
- Evaluation
- Fitness and health

Children should have opportunities to participate in:

- Gymnastics
- Ball games
- Athletics
- Dance
- Swimming

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know the rules and conventions of a number of activities and small games
1.2. Be able to perform simple activities with control and coordination
1.3. Be able to repeat and develop simple actions
1.4. Be able to apply simple tactics
1.5. Be able to apply movements in sequence
1.6. Be able to apply rules and conventions
1.7. Be able to observe, copy and develop actions performed by others
1.8. Be able to improve performance through observation and repetition
1.9. Be able to spend time at ease in water
1.10. Understand principles of safe activity

1.11. Understand that exercise has an effect on their body

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know the principal rules of a number of established sporting and athletic activities
2.2. Know the principles of water safety
2.3. Be able to choose appropriate skills and movements to suit a task
2.4. Be able to plan actions and movements
2.5. Be able to take part in a range of individual, pair, small group and team activities
2.6. Be able to perform a range of activities with control and coordination
2.7. Be able to apply tactics in competitive situations
2.8. Be able to apply expressive movements in sequence
2.9. Be able to improve performance through analysis, observation and repetition
2.10. Be able to move easily through water
2.11. Understand the importance of warming up before an activity
2.12. Understand that physical activity is good for their health
2.13. Understand the importance of rules
2.14. Understand the importance of fair play

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of physical education is concerned with healthy lifestyles and performing a range of movement activities
3.2. Know the principal rules of established sporting and athletic activities
3.3. Know the principles of water safety
3.4. Be able to perform with control, coordination, precision and consistency
3.5. Be able to plan their own performance
3.6. Be able to participate in small-side team games
3.7. Be able to use tactics to improve their own performance and that of a team
3.8. Be able to identify the features of a good performance
3.9. Be able to evaluate their own performance
3.10. Be able to refine and improve their performance based on their understanding of what is needed
3.11. Be able to apply the rules and conventions of a range of sports and activities
3.12. Be able to use movement as a means of expression and communication
3.13. Be able to swim a distance of at least 100 metres
3.14. Understand how physical activity affects the body
3.15. Understand the importance of dressing appropriately for physical activity
3.16. Understand the importance of hygiene
3.17. Understand the importance of safety procedures

Science

Introduction

In Science, children learn about the animate and inanimate world around them. They should be taught about:

- Developing a sense of wonder about the world around them
- Ways of finding out about living things, materials and phenomena
- Interpreting scientific evidence
- Communicating scientific ideas
- Making links between scientific activities and ideas
- Ways in which scientific ideas affect people's lives
- Ways in which scientific issues affect the environment
- The cultural implications of scientific activities and ideas
- The moral issues associated with scientific activities and ideas
- Cause and effect

The Knowledge, Skills and Understanding which children gain through their study of Science can be regarded in terms of:

- Enquiry
- Interpretation
- Living things
- Materials
- Physical processes
- Communicating

Milepost 1

Enquiry

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement
1.2. Be able to pose simple scientific questions
1.3. Be able to identify ways of finding out about scientific issues
1.4. Be able, with help, to conduct simple investigations
   - Thinking about what will happen
   - Using, with help, simple scientific equipment
   - Recognising when a test or comparison with one variable is fair
   - Observing what happens
   - Comparing what happened with what they thought would happen
   - Offering explanations for what happened, and why it happened
   - Making simple comparisons, identifying similarities, differences and simple patterns

- Recording and communicating their observations – orally, in writing and through ICT

1.5. Be able, with help, to gather information from simple texts

Living things

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know about the basic conditions needed for living things to survive
1.2. Know about the differences between living things and things that have never been alive
1.3. Know that living things grow and reproduce
1.4. Know that the features of the school environment affect the types of living things found there
1.5. Be able to sort living things into simple groups
1.6. Be able to recognise living things in the school environment
1.7. Understand that different locations support different living things
1.8. Know the names of the main external body parts of humans and animals
1.9. Know the names and characteristics of a range of animals
1.10. Know about the importance of exercise and healthy eating
1.11. Know about the role of drugs as medicines
1.12. Know about the senses
1.13. Be able to recognise similarities and differences between themselves and other people
1.14. Understand how to treat animals with care and sensitivity
1.15. Know the names of the parts of plants
1.16. Know that seeds grow into plants
1.17. Know that plants need light to grow
1.18. Know that plants need water to grow

Materials

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know the names and properties of a range of materials
1.2. Know about the uses of different materials
1.3. Know what happens when various materials are squashed, bent, twisted, stretched, heated or cooled
1.4. Be able to describe similarities and differences between materials
1.5. Be able to sort materials into groups according to their properties
1.6. Understand that the uses to which materials are put depend on their properties

Physical processes

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know about everyday appliances that use electricity

1.2. Know how simple electrical circuits operate and the effects they have on different devices
1.3. Know the function of a switch in an electrical circuit
1.4. Know how a range of forces, including pushes and pulls, can move objects
1.5. Know that darkness is the absence of light
1.6. Know that sounds travel from sources
1.7. Know that sounds are heard when they enter the ear
1.8. Understand that sound and light come from a variety of sources
1.9. Be able to describe the actions that result in changes in light, sound or movement

Milepost 2

Enquiry

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Be able to carry out simple investigations
- Suggesting ways of collecting evidence
- Preparing a simple investigation which is fair with one changing factor
- Predicting the outcomes of investigations
- Using simple scientific equipment
- Testing ideas using evidence from observation and measurement
- Linking the evidence to broader scientific knowledge and understanding
- Using evidence to draw conclusions
- Recording and communicating their observations and findings in a variety of ways
- Explaining their observations and findings

2.2. Be able to gather information from simple texts
2.3. Understand the importance of collecting scientific evidence
2.4. Understand some of the effects of what they learn on people's lives

Living things

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know the differences between living and non-living things
2.2. Know about processes and conditions that have an effect on living things
2.3. Know about the principles of nutrition, growth, movement and reproduction
2.4. Know about the living things that are supported by different environments
2.5. Know about ways in which animals and plants are suited to different environments
2.6. Know about the frequently occurring animals and plants that are supported by the environment around the school
2.7. Know about food chains in the local environment
2.8. Understand the principles of protecting living things
2.9. Know about the function and care of teeth in humans and other animals
2.10. Know about the function and actions of the heart in humans and other animals

2.11. Know about the functions of skeletons and muscles in humans and some other animals
2.12. Know about the main stages of the human life cycle
2.13. Know about the effect of exercise on the human body
2.14. Know about the effects that tobacco and alcohol have on the human body
2.15. Know about the effect of diet on the human body
2.16. Be able to classify animals according to their features
2.17. Know about the effects that light, air, water and temperature have on plants
2.18. Know about the functions of leaves
2.19. Know about the life cycle of plants
2.20. Be able to classify plants according to their features

Materials

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know that some materials conduct electricity
2.2. Know that some materials conduct heat more effectively than others
2.3. Know that temperature is a measure of heat
2.4. Know that some changes in materials are reversible and others are irreversible
2.5. Know about the changes that occur when materials are mixed
2.6. Know that some substances dissolve in water and others do not
2.7. Be able to compare common materials and objects according to their properties
2.8. Be able to distinguish between solids, liquids and gases
2.9. Be able to separate insoluble solids from liquids by filtering
2.10. Understand that different materials are suited for different purposes

Physical processes

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know about the principles of magnets and magnetic and non-magnetic materials
2.2. Be able to construct electrical circuits to make devices work
2.3. Be able to change the type or number of components in a circuit to have a different effect
2.4. Know that forces can have direction
2.5. Know that forces differ in size
2.6. Know about the effects of friction
2.7. Know that light travels from a source
2.8. Know that objects form shadows when they block the passage of light from a source
2.9. Know that sounds are made when objects vibrate
2.10. Be able to create sounds with a variety of objects
2.11. Be able to change sounds by altering variables
2.12. Know that the sun, earth and moon are approximately spherical
2.13. Know that the position of the sun appears to change during the course of a day and that shadows change as a result
2.14. Know that the sun provides the light and heat necessary for the earth

2.15. Know that the moon appears to change shape over the course of a month

Milepost 3

Enquiry

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of science is concerned with investigating and understanding the animate and inanimate world around them
3.2. Be able to conduct scientific investigations
- Posing scientific questions
- Choosing an appropriate way to investigate a scientific issue
- Using their scientific knowledge and understanding to predict the outcome
- Relating the outcome to their original prediction
- Making systematic and accurate measurements from their observations
- Drawing conclusions based on the evidence
- Explaining and justifying their predictions, investigations, findings and conclusions
- Recording and communicating their findings accurately using the most appropriate medium and the appropriate scientific vocabulary and conventions
- Repeating investigations, observations and measurements to check their accuracy and validity
- Identifying patterns in the results
- Using scientific language to explain any differences found in the results of investigations
- Suggesting ways in which their investigations and working methods could be improved
- Relating their own investigations to wider scientific ideas

3.3. Be able to gather evidence from a variety of sources
3.4. Be able to discriminate between evidence and opinion
3.5. Understand the importance of using evidence to test scientific ideas
3.6. Understand some of the effects of what they learn on people's lives

Living things

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know about the major classifications of living things
3.2. Know about the effects of food chains in a variety of environments
3.3. Know that changes in the environment have effects on living things
3.4. Know about the nature, functions and effects of micro-organisms
3.5. Be able to recognise and name the major plants and animals in the host country
3.6. Be able to classify locally occurring plants and animals according to their features
3.7. Be able to recognise and name the major plants and animals in their home country

3.8. Understand the relationship between living things and the environment in which they live
3.9. Know about the structure of the human body
3.10. Know the functions of the major internal and external parts of the human body
3.11. Know about similarities and differences between humans and other creatures
3.12. Know about the effect of exercise on the human pulse rate
3.13. Know about the effect of drug misuse on the human body
3.14. Know about the ways in which humans and other animals reproduce
3.15. Know that some characteristics of humans and other animals are inherited from their parents
3.16. Know that some characteristics of humans are influenced by their environment
3.17. Understand the importance of an appropriate diet for the health of humans and other animals
3.18. Know that some characteristics of plants are inherited from their parents
3.19. Know about the functions of the major parts of a plant
3.20. Know about factors that affect the growth of plants
3.21. Know about the function of roots in anchoring and feeding plants
3.22. Know about ways in which plants reproduce
3.23. Know about the effects of seed dispersal
3.24. Know about the conditions needed for germination

Materials

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know the distinctive properties of different materials
3.2. Know about the principles of materials acting as thermal insulators
3.3. Know what happens when materials are heated and cooled
3.4. Know about the principles of condensation and evaporation
3.5. Know about differences between metals and other materials
3.6. Know that matter is made up of particles
3.7. Know about the different arrangements of particles in solids, liquids and gases
3.8. Be able to compare and group rocks and soils according to their properties
3.9. Be able to group and classify materials according to their properties
3.10. Be able to identify changes that are reversible or irreversible
3.11. Be able to separate simple mixtures
3.12. Be able to recover dissolved solids through evaporation

Physical processes

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that heat is often produced as a by-product when one form of energy is converted to another
3.2. Know that heat can move from one object to another by conduction
3.3. Be able to represent electrical circuits in drawings using conventional symbols
3.4. Be able to construct circuits on the basis of drawings using conventional symbols
3.5. Be able to vary an electrical circuit to change its effect

3.6. Know about the nature and effect of gravitational force
3.7. Be able to identify the effects of physical forces
3.8. Be able to measure forces
3.9. Be able to identify the direction of forces
3.10. Know that light travels in a straight line until it strikes an object
3.11. Know that light can be reflected, refracted or absorbed
3.12. Know that light travels through some materials and not through others
3.13. Know that we see things when light from them enters our eyes
3.14. Know how sounds are changed by altering the nature and frequency of the vibrations
3.15. Know that vibrations from sound sources travel through a medium to reach the ear
3.16. Be able to identify the effects and uses of light and sound
3.17. Know about the relationship between the Earth and the rest of the solar system
3.18. Know that day and night are related to the Earth spinning on its axis
3.19. Know about the time taken for the Earth to orbit the sun and for the moon to orbit the earth
3.20. Know about the effects caused by the Earth moving
3.21. Know that patterns of stars in the sky stay the same
3.22. Be able to identify the major constellations
3.23. Know about the major sources of energy
3.24. Know how energy sources occur
3.25. Know how energy sources are obtained
3.26. Know how energy sources are used
3.27. Know the basic principles of renewable and sustainable energy

Society

Introduction

In Society, children learn about living as members of groups. They should be taught about:

- The main political and social institutions and systems
- The rights and responsibilities of individuals as members of groups
- The responsibilities that groups have for their members

The Knowledge, Skills and Understanding which children gain through their study of Society can be regarded in terms of:

- Individuals and groups
- Citizenship
- Health and safety
- Celebrations

The goals in society will normally be achieved through children's work in other subjects. They are closely linked to the international and personal goals.

Subject goals

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know that people have individual characteristics
1.2. Know some of the rules of groups to which they belong
1.3. Know about some of the factors that can harm or improve their health
1.4. Know about some of the factors that can improve or endanger their safety
1.5. Know about some major celebrations – including some in the host country
1.6. Understand that they belong to a number of groups (e.g. family, school, nation)

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know that they belong to different groups, have different home countries and different nationalities
2.2. Know that different groups have different purposes
2.3. Know that people within groups have different outlooks, characteristics and purposes
2.4. Know that they have rights and responsibilities
2.5. Know that people in different countries have different traditions, celebrations and ways of living
2.6. Know about ways of keeping healthy and safe through diet, clothing, exercise, hygiene and the observance of reasonable rules

2.7. Understand that people can affect their own health and safety
2.8. Understand that people's health and safety can be affected by a variety of factors including food, climate, rules, and the availability of resources
2.9. Understand that celebrations are influenced by a variety of factors including beliefs and history

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that the study of society is concerned with learning about living as members of groups
3.2. Know about the major forms of national government, including those in the host country and their home country
3.3. Know about significant international organisations
3.4. Know about the major traditions, celebrations and ways of living in the host country and their home country
3.5. Understand their own responsibilities in the groups to which they belong
3.6. Understand the responsibilities of others in those groups and in the wider community
3.7. Understand that the way in which people fulfil their responsibilities affects the lives of others
3.8. Understand that the behaviour of individuals has an effect on the lives of others
3.9. Be able to enquire into the nature of groups and social institutions and their effects on people's lives

Technology

Introduction

In Technology, children learn about designing and making products to solve problems and meet needs. They should be taught about:

- Designing, producing and using products
- Techniques of production
- The use of a range of materials and components
- The diversity of technological products
- How to think about design and production
- Identifying and responding to needs, wants and opportunities
- How to evaluate materials, processes and products
- The effects of technology on people's lives

The Knowledge, Skills and Understanding which children gain through their study of Technology can be regarded in terms of:

- Enquiry
- Design
- Production
- Materials and components
- Evaluation

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will:

1.1. Know that products in everyday use have an effect on people's lives
1.2. Be able to plan what they are going to make
1.3. Be able to describe their plans in pictures and words
1.4. Be able to use simple tools and materials to make products
1.5. Be able to choose appropriate tools and materials for their tasks
1.6. Be able to comment on their own plans and products and suggest areas of improvement
1.7. Be able to comment on the usefulness of products in everyday use

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will:

2.1. Know that the way in which products in everyday use are designed and made affects their usefulness
2.2. Be able to design and make products to meet specific needs
2.3. Be able to make usable plans
2.4. Be able to make and use labelled sketches as designs

2.5. Be able to use simple tools and equipment with some accuracy
2.6. Be able to identify and implement improvements to their designs and products
2.7. Be able to identify the ways in which products in everyday use meet specific needs
2.8. Be able to suggest improvements to products in everyday use

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will:

3.1. Know that technology affects people's lives
3.2. Know how the lives of people in the host country are affected by the extent of technological advance
3.3. Know how the lives of people in their home country are affected by the extent of technological advance
3.4. Be able to respond to identified needs, wants and opportunities with informed designs and products
3.5. Be able to gather and use information to suggest solutions to problems
3.6. Be able to devise and use step-by-step plans
3.7. Be able to consider the needs of users when designing and making
3.8. Be able to select the most appropriate available tools and materials for a task
3.9. Be able to work with a variety of tools and materials with some accuracy
3.10. Be able to test and evaluate their own work and improve on it
3.11. Be able to investigate the way in which simple products in everyday use are designed and made and how they work
3.12. Be able to evaluate the effectiveness of simple products in everyday use
3.13. Understand the need for accurate design and working
3.14. Understand the ways in which technology can be used to meet needs, wants and opportunities
3.15. Understand that different techniques, tools and materials are needed for different tasks
3.16. Understand that the quality of a product depends on how well it is made and how well it meets its intended purpose

World Languages

Introduction

Our World Languages Learning Goals for Milepost 2 are the same as those for Milepost 3 because language learning takes place on a continuum and will depend on the prior experiences of children, as well as the circumstances and location of the school.

In the World Languages units, children learn about and begin to acquire an additional language through a focus on oral communication. Children should be taught about:

- The knowledge, skills and understanding which help them to use the World Language effectively
- Enjoyment and appreciation of the World Language
- Cultural aspects of the countries where the World Language is spoken

The knowledge, skills and understanding which children gain through their study of World Languages can be regarded in terms of:

- Speaking
- Listening
- Reading
- Writing
- Cultural awareness

Accordingly, the Learning Goals for the World Language units are divided into the five categories specified above.

Milepost 2/3

Listening

2.1, 3.1	To know the sounds of the WL and recognise when it is being spoken
2.2, 3.2	To be able to identify high-frequency words and key vocabulary already taught when spoken by a variety of different voices, including possible regional/national dialects
2.3, 3.3	To be able to follow a simple instruction
2.4, 3.4	To be able to follow a short set of simple instructions
2.5, 3.5	To be able to recognise numbers (0-20), colours and days of the week
2.6, 3.6	To be able to listen and respond to simple songs, rhymes and stories
2.7, 3.7	To understand the gist of a range of spoken passages containing more complex phrases and sentences such as statements, short stories and songs

Speaking

2.8, 3.8	To know how to greet a variety of people in the WL and know how to respond to introductions
2.9, 3.9	To know the numbers (0-20), colours and the days of the week
2.10, 3.10	To know that word order can vary in different languages
2.11, 3.11	To know an identified* bank of high-frequency and key vocabulary
2.12, 3.12	To know simple connectives to join simple short phrases
2.13, 3.13	To be able to introduce themselves and respond appropriately to introductions
2.14, 3.14	To be able to say out loud pre-taught key vocabulary to a variety of audiences
2.15, 3.15	To be able to say numbers (0-20), colours and the days of the week
2.16, 3.16	To be able to participate in guided group activities of song, rhymes and games using simple repetitive language
2.17, 3.17	To be able to answer simple questions with pre-taught single words and short phrases
2.18, 3.18	To be able to express likes and dislikes in relation to avariety of contexts and topics
2.19, 3.19	To be able to ask a simple question using pre-taught vocabulary
2.20, 3.20	To be able to pronounce a growing bank of vocabulary accurately
2.21, 3.21	To be able to hold a short conversation using appropriate intonation
2.22, 3.22	To be able to ask for help using a given framework
2.23, 3.23	To understand the differences in spoken language and why these are used when speaking to different audiences such as speaking to a friend and speaking in a formal situation

Reading

2.24, 3.24	To know that word order can vary in different languages
2.25, 3.25	To be able to read pre-taught high-frequency words and key vocabulary
2.26, 3.26	To be able to match key vocabulary including common nouns, to pictures
2.27, 3.27	To be able to identify key information in simple texts
2.28, 3.28	To be able to follow a simple written instruction
2.29, 3.29	To be able to identify key vocabulary in a range of materials such as signs, charts, menus, leaflets and websites
2.30, 3.30	To understand a short passage of text

Writing

2.31, 3.31	To know of any differences of the WL alphabet compared with English including punctuation
2.32, 3.32	To know an identified* set of nouns and adjectives
2.33, 3.33	To know an identified* set of high-frequency words

2.34, 3.34	To know an identified* set of verbs and adverbs
2.35, 3.35	To know identified* grammatical elements of the WL
2.36, 3.36	To be able to write pre-taught key vocabulary with correct use of any symbols or letters particular to the language being studied
2.37, 3.37	To be able to combine a noun and an adjective
2.38, 3.38	To be able to combine a verb and an adverb
2.39, 3.39	To be able to annotate drawings and diagrams with key vocabulary
2.40, 3.40	To be able to use high-frequency words and key vocabulary in a variety of written forms such as storyboard, comics, news articles, posters
2.41, 3.41	To be able to describe themselves and key information about themselves in short sentences
2.42, 3.42	To be able to use simple punctuation marks in WL
2.43, 3.43	To be able to write sentences on a range of topics using given frameworks
2.44, 3.44	To be able to use appropriate resources to support learning such as online sites or bilingual dictionaries
2.45, 3.45	To be able to apply knowledge of vocabulary and make links to other subjects

Cultural Awareness

2.46, 3.46	To know where the WL is predominantly spoken across the world
2.47, 3.47	To know of any regional/national variations of the WL
2.48, 3.48	To know of any connection the school community has to the WL or the countries where it is predominantly spoken
2.49, 3.49	To be able to talk about the countries where the WL is spoken and how near or far they are to their home/host country
2.50, 3.50	To be able to compare traditional stories from a host country of the WL and a home country
2.51, 3.51	To be able to consider aspects of everyday life from the perspective of someone living in a host country of the WL
2.52, 3.52	To be able to present information about an aspect of everyday life of a country where the WL is spoken
2.53, 3.53	To understand the benefit of learning more than one language
2.54, 3.54	To understand that languages continuously change. To explore the influence the WL has had on other languages focusing on the morphology of identified vocabulary
2.55, 3.55	To begin to understand how cultural practices are reflected in language

Personal Goals

Children should be taught in such a way that they develop the personal qualities of:

- Enquiry
- Adaptability
- Resilience
- Morality
- Communication
- Thoughtfulness
- Cooperation
- Respect

Efforts towards achieving these goals should be reflected in the whole curriculum and in all other aspects of school life. To a large extent, they are assumed in the subject goals so the following personal goals are, in effect, largely a summary of the personal outcomes of children's learning.

By their nature, the personal goals are not age-specific. They apply to children – and adults – of all ages.

Enquiry

The vast majority of children will, through their study of the International Primary Curriculum:

1. Be able to ask and consider searching questions related to the area of study
2. Be able to plan and carry out investigations related to these questions
3. Be able to collect reliable evidence from their investigations
4. Be able to use the evidence to draw sustainable conclusions
5. Be able to relate the conclusions to wider issues

Adaptability

The vast majority of children will, through their study of the International Primary Curriculum:

1. Know about a range of views, cultures and traditions
2. Be able to consider and respect the views, cultures and traditions of other people
3. Be able to cope with unfamiliar situations
4. Be able to approach tasks with confidence
5. Be able to suggest and explore new roles, ideas, and strategies
6. Be able to move between conventional and more fluid forms of thinking
7. Be able to be at ease with themselves in a variety of situations

Resilience

The vast majority of children will, through their study of the International Primary Curriculum:

1. Be able to stick with a task until it is completed

2. Be able to cope with the disappointment they face when they are not successful in their activities
3. Be able to try again when they are not successful in their activities

Morality

The vast majority of children will, through their study of the International Primary Curriculum:

1. Know about the moral issues associated with the subjects they study
2. Know about and respect alternative moral standpoints
3. Be able to develop their own moral standpoints
4. Be able to act on their own moral standpoints
5. Be able to explain reasons for their actions

Communication

The vast majority of children will, through their study of the International Primary Curriculum:

1. Be able to make their meaning plain using appropriate verbal and non-verbal forms
2. Be able to use a variety of tools and technologies to aid their communication
3. Be able to communicate in more than one spoken language
4. Be able to communicate in a range of different contexts and with a range of different audiences

Thoughtfulness

The vast majority of children will, through their study of the International Primary Curriculum:

1. Be able to identify and consider issues raised in their studies
2. Be able to use a range of thinking skills in solving problems
3. Be able to consider and respect alternative points of view
4. Be able to draw conclusions and develop their own reasoned point of view
5. Be able to reflect on what they have learned and its implications for their own lives and the lives of other people
6. Be able to identify their own strengths and weaknesses
7. Be able to identify and act on ways of developing their strengths and overcoming their weaknesses

Cooperation

The vast majority of children will, through their study of the International Primary Curriculum:

1. Understand that different people have different roles to play in groups
2. Be able to adopt different roles dependent on the needs of the group and on the activity
3. Be able to work alongside and in cooperation with others to undertake activities and achieve targets

Respect

The vast majority of children will, through their study of the International Primary Curriculum:

1. Know about the varying needs of other people, other living things and the environment

2. Be able to show respect for the needs of other people, other living things and the environment
3. Be able to act in accordance with the needs of other people, other living things and the environment

International Goals

The international goals are based on an understanding of the characteristics of an international curriculum:

An international curriculum should develop in children:

- Knowledge and understanding beyond that related to their own nationality
- An understanding of the independence and interdependence of peoples, countries and cultures

It should enable children to:

- Adapt to other education systems
- Develop both a national and an international perspective

It should include:

- A degree of focus on the host country
- A degree of focus on the home country

These characteristics should be reflected in the whole curriculum and in all other aspects of school life. They are assumed in the subject and personal goals. So the following international goals are, in effect, a summary of the international outcomes of children's learning at the three mileposts.

Milepost 1

By the end of the school year in which they are 7, the vast majority of children will, through their study of the International Primary Curriculum:

1.1. Know that children within the class and school have different home countries
1.2. Know the names and approximate locations of the home countries of children within the class (and/or school)
1.3. Know about some of the similarities and differences between the lives of children in the different home countries and in the host country
1.4. Be able to respect one another's individuality and independence
1.5. Be able to work with each other where appropriate

Milepost 2

By the end of the school year in which they are 9, the vast majority of children will, through their study of the International Primary Curriculum:

2.1. Know about some of the similarities and differences between the different home countries and between them and the host country
2.2. Know about ways in which these similarities and differences affect the lives of people
2.3. Be able to identify activities and cultures which are different from but equal to their own

Milepost 3

By the end of the school year in which they are 12, the vast majority of children will, through their study of the International Primary Curriculum:

3.1. Know about the key features related to the lives of people in their home country and, where appropriate, their parents' home countries
3.2. Know about the key features related to the lives of people in the host country and/or, where appropriate, other countries in which they have lived
3.3. Know about ways in which the lives of people in the countries they have studied affect each other
3.4. Know about similarities and differences between the lives of people in different countries
3.5. Be able to explain how the lives of people in one country or group are affected by the activities of other countries or groups
3.6. Be able to identify ways in which people work together for mutual benefit
3.7. Understand that there is value both in the similarities and the differences between different countries

(NB: By the lives of people in these goals we mean to include such things as the history, geography, society, arts and traditions in the countries concerned. We also mean to include the diversity of experience within those countries.)

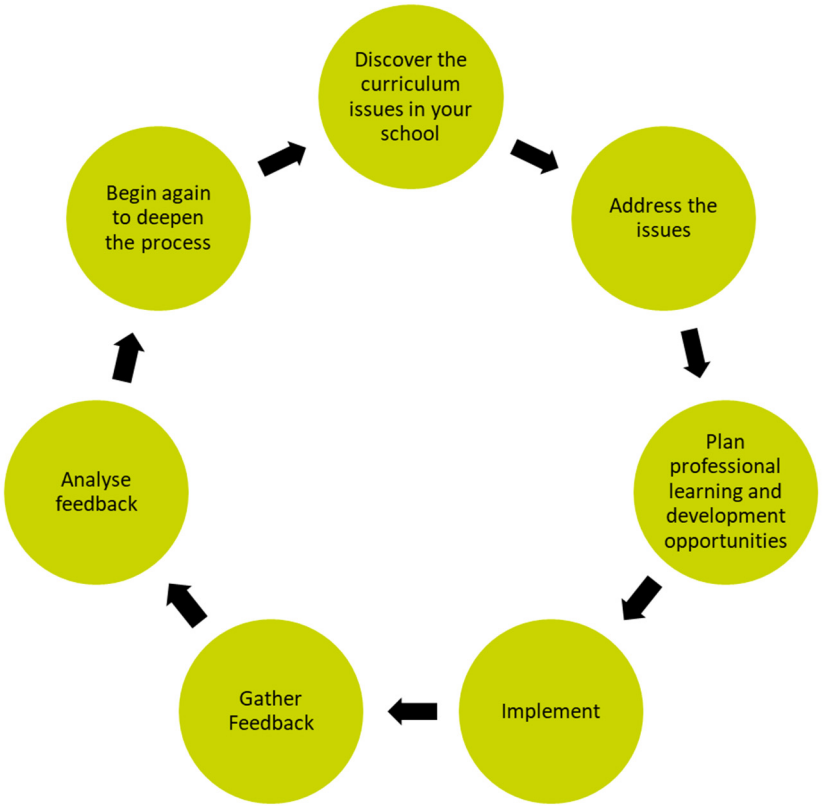
Appendix B: Frequently Asked Questions (FAQs) for the IPC

As more and more schools become IPC members we are developing more knowledge and understanding of the issues connected with introducing the IPC into your school. This section of the file looks at some of those issues and offers advice based on the many conversations and in-school experiences we have had with member schools.

What are the implications of implementing the IPC for stakeholders?

Implementation is a planned process. The model below shows the six stages of implementation:

1. Discover the issues
2. Address the issues
3. Plan professional learning and development opportunities
4. Implement
5. Gather feedback
6. Analyse feedback
7. Begin a refined implementation



The 3rd edition IPC Self-Review Process, available to download from MyFieldwork, can be used to underpin the entire process of implementation.

The first major task of implementation, of course, is making the initial choice. To have come this far you will already have identified that the IPC brings important strengths to the curriculum provision in your school. You may have identified some of these strengths in the description of some of the features of the IPC above.

Once you have made this decision your first task is then to help all of the different stakeholders in your school see how the IPC addresses their issues. It is important to realise that the same approach won't be appropriate for each of these groups. In gaining initial support for the IPC you need to identify the particular concerns of each of the important groups in your school and address them specifically, showing how the IPC can address these.

In working with existing member schools of the IPC we have identified a number of these concerns that are common to each of the groups. Use the list below as a starting point. Make sure, though, that you have also thought about your own school specifically and added to each section any concerns that are important and relevant to your context.

What do school board members and governing bodies want to know?

- Does this new curriculum match current standards the school uses to define learning?

The IPC's Learning Goals have been carefully checked against those contained in various other curricula, including national and state curricula. Many schools, based in internationally and in the UK, follow the outcomes for the National Curriculum for England. In 2014, the IPC was updated, with some content specifically written to help achieve and exceed these outcomes. Support tools, including cross referencing documents and sample route plans for the National Curriculum for England are available on MyFieldwork. Other schools around the world have found great success aligning outcomes of their state and national curriculum with the IPC Learning Goals.

- How will parents react to the new curriculum?

It is true that a number of parents are worried by the introduction of any new curriculum. But many IPC member schools have organized pre-implementation discussion groups or evenings at which information is presented and issues raised. Our experience is that parents are particularly keen on the clarity of the learning outcomes and their explicitness within each unit, and with the enhanced communication opportunities that the IPC provides – through letters accompanying the units of learning, and the chance to get involved in entry and exit points. The 3rd edition IPC Self-Review Process provides support with involving the community in the implementation and development of the curriculum, so they become integral to improvements in children's learning.

- Does the IPC have any validity?

It is important to demonstrate to those who might not be educators - and who might not, therefore, be able to see the value of the IPC through the actual material - that the IPC is recognised externally as an important and rigorous curriculum. The independent report from the Centre for the Study of Education in an International Context at the University of Bath is very positive about

the IPC and is available to any member school. The influential Campaign for Learning has also commented very positively about the IPC, and the European Council for International Schools (ECIS) has chosen the IPC as its curriculum of choice in its new schools. The highly regarded Council of International Schools (CIS), which runs accreditations for international schools, also runs a joint accreditation process with the IPC. Taking the IPC Forward: Engaging with the International Primary Curriculum (2012), a book of essays about the IPC edited by Professor Jeff Thompson and Dr Mary Hayden from the Department of Education at the University of Bath, has been well received and reviewed and can be recommended for all stakeholders to read to get a wider picture of the IPC.

What do principals, headteachers, leaders and administrators want to know?

- Will the IPC receive approval of the Board?

The IPC helps school leaders and administrators become more effective by increasing their knowledge and understanding of what is happening in classrooms, by providing clear learning goals and descriptions of activities and by helping the school to focus on two of the key elements of all effective schools – student learning and consistency. Some schools choose to involve the Board as part of the Community strand of the 3rd edition IPC Self- Review Process, ensuring they are integral to the successful implementation of the IPC.

- Will the IPC receive the approval of teachers?

It is quite likely that teachers will have been involved in choosing to implement the IPC in the first place. We recommend this as it is their major toolkit and will impact in some way on their current practice. But during the process of implementation itself, administrators will want teachers to be confident that changing to the IPC is not too difficult and is rewarding, helpful, supportive, effective, efficient and fun. MyFieldwork provides tools and advice on planning, teaching and assessing with the IPC, alongside case studies, resources and other useful information.

Some teachers do like developing curriculum; those of us involved in the IPC are some of those teachers. But many teachers are frustrated by the amount of time curriculum development takes up and, in particular, how it eats into the time they have for planning, marking, teaching assessing, and most importantly learning. The IPC is hugely supportive to those teachers who want to think most about the learning that is taking place in their classrooms. It provides as much practical help as it is possible to give without restricting teachers to 'teaching by numbers.' As with all challenging curricula, there is a process of getting used to the key ideas of the IPC and how they can be implemented but almost all teachers report to us that this is exciting in itself.

What do teachers want to know?

- How much out-of-class time do they need to invest?

Curriculum developers often fail to understand the context of teachers. Teaching is itself a time-consuming job - preparing lessons, teaching, marking, assessing, and meeting with parents and other colleagues – all these aspects of teaching eat up a great deal of time. The IPC does enable teachers plenty of freedom – to adapt existing IPC units according to their needs, context, children's interests or specific national curriculum. After a while, some schools even create their own units following the IPC process of learning. The IPC is also hugely supportive to classroom teachers and actively seeks to reduce the amount of time teachers have to spend preparing work outside of the classroom. We want teachers to be focused as much as possible on the learning that takes place in classrooms, not on unnecessary activities outside of classrooms.

- How much preparation is required to teach the IPC?

Even if teachers don't have to write their curriculum they still have to spend time planning and preparing for learning. Most teachers understand this but they don't want it to become excessive. It is absolutely right that teachers should be responsible for the final planning before they begin to help children learn in the classroom. The IPC helps them in this by providing almost everything they need before reaching that final planning stage, ensuring that any planning is efficient and effective in terms of teaching time and impact on learning. Advice on planning is included later in this file.

- What resources are required to teach the IPC?

As we mentioned earlier, a good curriculum is the major resource for teachers. But a curriculum also need its own resources and teachers will rightly be concerned that finding those resources won't make implementation more difficult.

The IPC needs resources like every other curriculum, such as practical resources and equipment; books for information and research; access to the internet, etc. For the IPC these resources are particularly important as it is not textbook driven. But evidence from our member schools suggests that many school libraries already contain sufficient material for children to work with. When they don't, a number of suppliers provide schools with packs of material that support the IPC. Advice about recommended resources and useful websites is shared through our newsletters, and online through the Pinboard section of MyFieldwork, where schools can upload and share their own resources, as well as connect with teachers and learners from around the world. In terms of other resources, our member schools tell us that they often already have everything else they need, and if not they adapt learning tasks to take into account any resourcing limitations. We do not believe schools should spend more money on resources specifically to support the IPC.

- How can parents support the teaching and learning going on in the classroom?

Teachers in primary schools are closer to parents, care givers and guardians than any stakeholder group other than the children themselves. They will want to be sure that a new curriculum receives support from parents.

The evidence we have from our member schools is that the clarity of the IPC's Learning Goals, their explicitness within each unit and the letter home provides parents with a huge amount of

reassurance about the IPC. Member schools also report that children are excited by the activities and are keen to let their parents know about their new learning. In addition to this, there are plenty of opportunities to invite parents in to share in the learning through entry and exit point activities.

- How they will know whether children have learned anything?

Good teachers want to know whether children have learned anything.

Effective assessment succeeds or fails on the basis of the clarity of the learning goals and the IPC is extremely helpful in letting teachers know what children have learned, the progress they are making and where they can go next with their learning. Each unit of learning contains many opportunities for teachers to assess children's developing skills, using the IPC Assessment for Learning programme – which includes teacher and child-friendly rubrics, alongside learning advice and an online Assessment Tracking Tool to support this process.

- How adaptable and flexible is the IPC?

Because children construct their own learning and teachers try to help them, teaching is a creative act. Planning is important but it can only do so much. Teachers will be concerned that whilst a curriculum should provide as much help as possible it doesn't stop this creativity from happening.

There are certain aspects of the IPC that are sacrosanct: for example, the Subject, Personal and International Learning Goals and the way these drive the learning throughout every unit of learning; the independence and interdependence of subjects within a unit, etc. But the IPC is a learning-focused curriculum and we are aware that teachers will need to determine for themselves how the material can best be used in their classrooms. We encourage this flexibility.

What do parents, care givers and guardians want to know?

- Does the IPC make learning enjoyable and fun?

Dealing with children who express boredom and frustration is an added pressure for parents, care givers and guardians. Reports indicate that children love learning with the IPC – we have a lot of qualitative evidence of this, and you only need to visit our Twitter and Facebook pages to see how schools around the world want to share this learning with us! Follow us @The_IPC or visit www.facebook.com/InternationalPrimaryCurriculum to see examples of great learning, great teaching and great fun in action!

- Does the IPC reflect and respect their own cultural context?

National mindedness is as important as international mindedness. The development of international mindedness is a central part of the IPC and all our units of work demonstrate respect for different cultural contexts. As well as being the first primary curriculum to specifically support cultural understanding through International Learning Goals, the IPC activities are often founded on helping children understand both their own culture and those of others.

- Are their children learning?

Parents, care givers and guardians are particularly conscious of the progress their children are making. Whilst they want the activities in which they are involved to be fun they also expect to see learning taking place. We know that the activities are crucial to improving learning and the IPC is explicitly focused on learning rather than doing, on outcomes rather than activity. The definition of a successful journey through the IPC is not just one of activities carried out and enjoyed, and content covered, but of learning being improved through those activities. It is for this very reason that the Learning Goals are so explicit throughout the IPC and why we provide our own IPC Assessment for Learning Programme. Criteria 1 and 6 of the 3rd edition IPC Self-Review Process ('A clear focus on improving learning' and 'Rigorous children's learning, and teacher's high expectations of it') ensure learners, teachers, leaders and the community are all involved in ensuring that learning is at the heart of IPC implementation and development.

- How can they be involved in their children's learning?

Each unit of the IPC provides a letter to parents, care givers and guardians that explains what their children should be learning, what they will be doing in school and how they might help at home. In addition to this, the IPC helps to engage parents in children's learning through regular opportunities to get involved with entry and exit point activities. The 3rd edition IPC Self-Review Process values the contributions of parents, care givers and guardians so much that it includes a specific strand in the rubrics dedicated to 'Community'.

- Is the quality of teaching material good?

Many adults associate both a curriculum and 'learning' with a series of textbooks, reflecting their own experiences of learning in school. They will need to be reassured that the lack of textbooks for the IPC isn't hindering their children's learning. Without a doubt this is one of the most difficult, but legitimate, issues for parents, care givers and guardians for whom textbooks can be either a cultural necessity or an important indicator that children are working. The proof of the IPC is through improvements in learning rather than the books or materials used, so it is important to show parents, care givers and guardians that learning has taken place. But it is also important to show them the range of activities in each unit and the Learning Goals they each set out to achieve.

What do the learners want to know?

- How much are they learning?

Children do know that schooling is about making progress. They often feel more secure if that progress is made clear to them. Children enjoy having explicit learning goals shared with them. It helps them to know what to focus on and to monitor their own learning. The IPC helps children in this respect, too. The 3rd edition IPC Self-Review Process dedicates a whole strand to the learners themselves, ensuring that they are vital to the implementation and development of the curriculum.

- Will the learning be enjoyable?

We all know how dispiriting and demotivating it is to be bored. Children want their learning to be exciting, interesting and relevant. The process of the IPC is built on what neuroscientific research tells us about the most effective ways in which children learn in this age range. That is why every unit starts with an entry point – to engage and excite the children about the learning ahead. It is also why we carry out a knowledge harvest, so that children's learning can build on their existing knowledge, skills and understanding. The learning activities in the IPC have been written to appeal to children of different ages and build on the experiences of teachers in classrooms. Each subject area has planned research activities which draw on a wide range of learning approaches such as role play, digital learning, library research and so on. IPC research activities are experiential and exploratory, enabling children to process and present the information they have gained in their research activities through a range of approaches which tap into their different strengths and interests, and enable them to get better at other ways of recording.

- How can parents, care givers and guardians support their learning?

Children don't enjoy conflicts between school and home. They are likely to work better in school if they know that their parents, care givers and guardians approve of what they are doing. The IPC helps parents, care givers and guardians support their children but also helps children provide them with more information than might previously have been the case through the 'Letter to Parents' included at the end of each unit, and the parent handouts and PowerPoint on MyFieldwork.

Appendix C: Research into Learning

The recent explosion of research from neuroscience and cognitive science has been of great interest to teachers and leaders. Some of it can be of real, practical help to educators that want to improve learning. It provides new ideas to use in the classroom and helps to explain why some of our intuitive, but previously difficult to justify, methods work as well as they do.

But there is also a danger of jumping on the bandwagon too soon. Too many writers and educationalists have been quick to advocate teaching methods and techniques that are simply not supported by any reliable evidence – you may have seen some of these referred to in the media as 'neuromyths'.

Although we have learnt so much in recent years there is still much more that is not yet understood, even by brain researchers, most of whom are reluctant to recommend many popular approaches to teachers at all. For this reason we encourage school leaders and teachers to view research into learning as a non-negotiable part of their own learning and professional development. Through reading, research and sharing, teachers should develop deep insights into the nature of learning and not only apply this in their classrooms, but share this learning with their children.

Criterion 7 of the 3rd edition IPC Self-Review Process ('The implementation of the learning process of the IPC') links to this area of research and learning.

We can't cover the breadth of research that's out there, but here are some interesting trends and themes you might want to consider:

1. Growth Mindsets

In Art, children learn about visual and tactile expression and communication. They should be taught about: The concept of 'fixed' and 'growth' mindsets stems from the research carried out by Stanford University psychologist Carol Dweck. One of her best-known studies involved splitting children into two groups and giving them an identical test, at which most would succeed. One group were told they had done really well because they tried really hard. The other group were told they had done really well because they were smart. They were then told they were going to have another test, but could choose from a simple one or a harder one from which they might learn more. The group who were praised for their effort nearly all wanted to try the harder test. In the group that were praised for their intelligence, nearly 80% opted for the easier test.

Dweck's research highlights the difference between what she calls a 'fixed' mindset (performance orientated, likely to give up easily and not fulfil their potential) versus a 'growth' mindset (learning orientated, believes intelligence can be developed and embraces challenges). The message is clear – praise process and not ability.

In an article 'You Can Grow Your Intelligence' (2008) Dweck talks about the brain being more like a muscle which changes and gets stronger the more you use it – something which is underpinned by scientific research. She explains how neurons in the brain are connected to other cells in the network and it is the communication between these brain cells which allows people to think and

solve problems. Neurons are hard-wired to make connections with each other and when we learn things these connections multiply and get stronger.

As you learn, your brain is looking for connections between your current and previous learning. This is why the 'Big Idea' and Knowledge Harvest is such an important part of any IPC unit – it helps children make connections between what they already know and what they are going to learn.

2. Meta-cognition

Meta-cognition is the term used to describe learning about learning, or what learning consists of (Outstanding Formative Assessment, Shirley Clarke, 2014).

It is worth referencing here the work of Professor John Hattie, an educational researcher who developed a way of ranking various influences on learning through a range of meta-analyses. He synthesised more than 900 meta-analyses, involving over 50,000 studies and drawing on the experiences of 240 million school-aged students. His book, Visible Learning, (2009), identified 150 classroom interventions and listed them in order of effectiveness.

Meta-cognitive strategies ranked at number 13 in the list. In his book Hattie explains, "when tasks are more complex for a pupil, the quality of meta-cognitive skills rather than intellectual ability is the main determinant of learning outcomes."

Thinking about learning is important. In the book Making Thinking Visible, (Ritchhart, Church and Morrison, 2011) colleagues from Harvard's Project Zero have developed a set of thinking routines that not only help children to learn, but also to learn how to learn. The authors explain that 'it's one thing for us as teachers to articulate the kinds of thinking we are seeking to promote; it is another for students to develop a greater awareness of the significant role that thinking plays in cultivating their own understanding.'

'Slow thinking' (a term used by Guy Claxton in his book 'Hare Brain, Tortoise Mind', 1998) is also something that teachers need to consider when the children are reflecting on their learning. When faced with difficult and complex learning, our brains need a large amount of input followed by a period of downtime. During this downtime, our brains continue to process the information we have received. This process of digestion and sedimentation has come to be known as 'slow thinking'. This is why it's a good idea to have the knowledge harvest and explaining the theme on display throughout a unit, so children can always be slow thinking their ideas and questions and piecing the answers together over time.

Throughout the IPC units you will find many opportunities to help teachers and children think about learning and learn more about learning.

3. Memory

Daniel T. Willingham, a cognitive psychologist at the University of Virginia, explores the process of memory in his book Why Don't Students Like School? (2009). He believes that the mind is not designed for thinking, and when it can get away with it, our brains will rely on memory instead. Broadly speaking, we have two types of memory – the working memory (or short-term memory) and the long-term memory. Space in our working memory is limited – it is only able to hold around 3-7 new pieces of information at any one time – and too often we overload it. Successful learning involves transferring information and knowledge from our working memory into our long-term memory and being able to retrieve them again. This can be achieved through the use of memory aids such as 'chunking', and through a balance of introducing new learning and consolidating existing learning.

Daisy Christodoulou adds to Willingham's argument in her book Seven Myths About Education (2014). In it she explains that our long-term memory is capable of storing thousands of facts, and these facts combined form what is known as a 'schema'. When we meet new facts about a topic or area of learning, we assimilate them into that schema meaning that if we already have a lot of facts in that particular schema, it is much easier for us to learn new things about a topic. Willingham also asserts this when he says that, 'those who know more knowledge, gain more knowledge' (2009).

This has interesting implications for embarking on the IPC units of work – do your children have the necessary background knowledge to access the learning tasks you are going to set them? In light of this teachers may consider carrying out the Knowledge Harvest before the Entry Point or sending home some key information about a topic before children start their learning.

And it's not just only knowledge we need to work on, it's also skills. Willingham believes children should still practice something even when it appears they have mastered the skill and are no longer improving. He tells us that, 'Mental processes can become automised' (2009) and it is this mastery which reinforces the basic skills that are required for the learning of more advanced skills, and this practice that protects against forgetting, improves transfer and clears the working memory for thinking.

4. Positive and negative emotions

Negative emotions inhibit learning from taking place. Positive emotions can help learning take place. All strong emotions leave memory traces. This is why IPC wants to see 'great learning, great teaching, great fun' coming to life through our units.

There are important implications for classroom practices here.

Firstly, deep engagement in learning activities is linked to having positive experiences. Mihaly Csikszentmihalyi, Professor of Psychology and Management at Claremont Graduate University, is the architect of the notion of 'flow' as being one of the components of great fun (Flow: The

Psychology of Happiness, 2002). 'Great fun' in this context is something that results from rigorous engagement in an activity as much as it results from a quick hit of immediate gratification. When planning for learning activities, a rigorous approach supported by a range of appropriate strategies and interventions is essential.

Secondly, Willingham tells us that our memory is a product of what we think about. What we want children to think about is learning. So, when planning a lively enjoyable lesson, it is important to ensure that the learning is still made clear, and is shared, revisited and reflected on. Remember to always ask yourself 'what are the children learning?' rather than being concerned with what the children are doing.

Thirdly, just as most of us will have experienced a state of 'flow' at some time or another, so we will have experienced the crippling effect of stress on our ability to learn. In his book Emotional Intelligence (1996), Daniel Goleman shows clearly why stress is such an important inhibitor to learning, as it can result in what he calls emotional 'flooding' or 'hi-jacking' in parts of the brain. The best state for learning is 'relaxed alertness'. Children who are stressed can't learn; it's as simple as that. Because of this, it is vital that educators acknowledge the importance of creating a positive environment for learning.

Criteria 1 and 6 ('Rigorous children's learning and teachers' high expectations of it' and 'A clear focus on improving learning') both link to this area of research.

5. Assessment for learning

'The most powerful educational tool for raising achievement and preparing children to be lifelong learners, in any context, is formative assessment.' Shirley Clarke Outstanding Formative Assessment, (2014)

Clarke's statement is bolstered by the outcomes of Hattie's research which ranks key aspects of formative assessment at the top end of the list including:

- Assessment literate students (students who know what they are learning, have success criteria, can self-assess, etc.)
- Providing formative evaluation
- Feedback

There's no getting around it – if we're passionate about improving children's learning, we need to be passionate about assessment too.

6. Understanding is tricky

Understanding has been poorly represented in many curricula, with an additional pressure to use the term inappropriately. In an educational sense, understanding has come to have great power and is frequently cited as the goal of most learning. Because of this, sometimes curriculum writers

and developers have focused on developing and assessing understanding without realizing how complex it is.

Educators have been grappling with their 'understanding' of understanding for many years. In 1933, in his book How We Think, John Dewey described understanding as 'the result of facts acquiring meaning for the learner. To grasp the meaning of the thing, an event, or a situation is to see it in its relationship to other things: to see how it operates or functions, what consequences follow from it, what causes it, what uses it can be put to (…)The relation of means-consequence is the center and heart of all understanding'.

Willingham (2009) has his own ideas about understanding. To him, understanding is in fact remembering in disguise, and pupils understand new things (things they don't know) by relating them to old ideas things they do know). He explains that understanding the new ideas is mostly about getting the right old ideas into the working memory and rearranging them, making comparisons and thinking about them in a different way.

Willingham also talks of the need to be realistic about what students can achieve and how quickly this can be done. Teaching and assessing for understanding all the time is therefore misguided.

Criterion 5 of the IPC Self-Review Process ('The importance and development of knowledge, skills, and understanding') links to this area of research.

7. The link between mind and body

There is a lot of recent and emerging researching into the link between mind and body, and what we are consistently being told is that good diet, general health, exercise and a good night's sleep can help our brains work more effectively.

For general brain and body health, a balanced diet including plenty of fresh fruit and vegetables is vital. Your brain also needs a steady supply of energy, which it can get from glucose (which can be found in certain types of carbohydrates).

Exercise is also believed to be another important ingredient for a healthy brain. Not only does exercise ensure the brain gets plenty of oxygen, research also suggests that it can support learning and memory too. David Bucci, an associate professor at Dartmouth's Department of Psychological and Brain Sciences, explains that 'The implication is that exercising during development, as your brain is growing, is changing the brain in concert with normal developmental changes, resulting in your having more permanent wiring of the brain in support of things like learning and memory. It seems important to (exercise) early in life. (Exercise Affects the Brain, Petra Rattue, 2012, www.medicalnewstoday.com/articles/245751.php).

Getting enough sleep is equally important as it allows the brain to repair itself and consolidate all of the learning that has taken place that day. In addition to this, studies by an American research team show sleep to be important as it is during this time that brain cells shrink and open up gaps

between neurons allowing fluid to wash the brain clean (Sleep 'cleans' the brain of toxins, James Gallagher, 2013, www.bbc.co.uk/news/health-24567412).

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