Health and wellbeing across learning: responsibilities of all¹ Experiences and outcomes

Learning in health and wellbeing ensures that children and young people develop the knowledge and understanding, skills, capabilities and attributes which they need for mental, emotional, social and physical wellbeing now and in the future.

Learning through health and wellbeing promotes confidence, independent thinking and positive attitudes and dispositions. Because of this, it is the responsibility of every teacher to contribute to learning and development in this area.

Building the Curriculum 1

Each establishment, working with partners, should take a holistic approach to promoting health and wellbeing, one that takes account of the stage of growth, development and maturity of each individual, and the social and community context.

I can expect my learning environment to support me to:

- develop my self-awareness, self-worth and respect for others
- meet challenges, manage change and build relationships
- experience personal achievement and build my resilience and confidence
- understand and develop my physical, mental and spiritual wellbeing and social skills
- understand how what I eat, how active I am and how decisions I make about my behaviour and relationships affect my physical and mental wellbeing
- participate in a wide range of activities which promote a healthy lifestyle
- understand that adults in my school community have a responsibility to look after me, listen to my concerns and involve others where necessary
- learn about where to find help and resources to inform choices
- assess and manage risk and understand the impact of risk-taking behaviour
- reflect on my strengths and skills to help me make informed choices when planning my next steps
- acknowledge diversity and understand that it is everyone's responsibility to challenge discrimination.

¹ Because of the nature of development and learning in health and wellbeing, many of the experiences and outcomes are written to span two or more levels. They should be regularly revisited through a wide range of relevant and realistic learning experiences to ensure that every child and young person is progressing in his or her development and learning.

Health and wellbeing across learning: responsibilities of all: experiences and outcomes

Mental, emotional, social and physical wellbeing

Mental, emotional, social and physical wellbeing are essential for successful learning.

The mental, emotional, social and physical wellbeing of everyone within a learning community should be positively developed by fostering a safe, caring, supportive, purposeful environment that enables the development of relationships based on mutual respect. The four aspects of wellbeing are inextricably linked and are only separated here for practical purposes.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4				
Mental and emotional	I am aware of and ab	I am aware of and able to express my feelings and am developing the ability to talk about them.							
wellbeing	I know that we all exp	I know that we all experience a variety of thoughts and emotions that affect how we feel and behave and I am learning ways of managing them.							
		I understand that there are people I can talk to and that there are a number of ways in which I can gain access to practical and emotional support to help me and others in a range of circumstances.							
	I understand that my feelings and reactions can change depending upon what is happening within and around me. This helps me to understand my own behaviour and the way others behave.								
	I know that friendship, caring, sharing, fairness, equality and love are important in building positive relationships. As I develop and value relationships, I care and show respect for myself and others.								
		I understand the importance of mental wellbeing and that this can be fostered and strengthened through personal coping skills and positive relationships. I know that it is not always possible to enjoy good mental health and that if this happens there is support available.							
	I am learning skills ar	I am learning skills and strategies which will support me in challenging times, particularly in relation to change and loss.							
	I understand that peo	I understand that people can feel alone and can be misunderstood and left out by others. I am learning how to give appropriate support.							

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Social wellbeing	As I explore the rights to which I and others are entitled, I am able to exercise these rights appropriately and accept the responsibilities that go with them. I show respect for the rights of others.							
	I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.							
	I make full use of and value the opportunities I am given to improve and manage my learning and, in turn, I can help to encourage learning and confidence in others.							
	Representing my class, school and/or wider community encourages my self-worth and confidence and allows me to contribute to and participate in society.							
	Through contributing my views, time and talents, I play a part in bringing about positive change in my school and wider community.							
	I value the opportunities I am given to make friends and be part of a group in a range of situations.							
Physical wellbeing	I am developing my understanding of the human body and can use this knowledge to maintain and improve my wellbeing and health.							
-	I am learning to assess and manage risk, to protect myself and others, and to reduce the potential for harm when possible.							
	I know and can demonstrate how to keep myself and others safe and how to respond in a range of emergency situations.							
	I know and can demonstrate how to travel safely.							

Planning for choices and changes

Learners need to experience opportunities which are designed not only to raise their awareness of future choices but also raise their expectations and aspirations. They develop the skills for personal planning and making decisions in the context of curriculum, learning and achievement which will prepare them for next stages in life.

Learners should experience activities which enable them to develop the skills and attributes they will need if they are to achieve and sustain positive destinations beyond school. Demands and employment patterns are changing, so it is particularly important for all young people to develop high levels of skill and also an understanding of the world of work, training and lifelong learning so that they can embrace opportunities.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
and play, make cho develop r and inter encourag	r, I explore and a oices to a my learning to rests. I am s	Through taking part in a variety of events and activities, I am learning o recognise my own skills and abilities as well as those of others.	Opportunities to carry out different activities and roles in a variety of settings have enabled me to identify my achievements, skills and areas for development. This will help me to prepare for the next stage in my life and learning.	I am developing the skills and attributes which I will need for learning, life and work. I am gaining understanding of the relevance of my current learning to future opportunities. This is helping me to make informed choices about my life and learning.	Based on my interests, skills, strengths and preferences, I am supported to make suitable, realistic and informed choices, set manageable goals and plan for my further transitions.

Physical activity and sport

In addition to planned physical education sessions, physical activity and sport take place in the classroom, in the school, during travel such as walking and cycling, in the outdoor environment and in the community. Learning in, through and about physical activity and sport is enhanced by participating in a wide range of purposeful and enjoyable physical pursuits at break times, lunchtimes, within and beyond the place of learning.

The experiences and outcomes are intended to establish a pattern of daily physical activity which, research has shown, is most likely to lead to sustained physical activity in adult life. Experiences and outcomes should also open up opportunities for learners to participate and perform at their highest level in sport and, if interested, pursue careers in the health and leisure industries.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I am enjoying daily opportunities to participate in different kinds of energetic play, both outdoors and indoors.	Within and beyond my place of learning I am enjoying daily opportunities to participate in physical activities and sport, making use of available indoor and outdoor space.			

Relationships

Learners develop an understanding of how to maintain positive relationships with a variety of people and are aware of how thoughts, feelings, attitudes, values and beliefs can influence decisions about relationships.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
I am aware of how friendships are formed and that likes, dislikes, special qualities and needs can influence relationships. I understand positive things about friendships and relationships but when something worries or upsets me I know who I should talk to.		I am aware that positive friendships and relationships can promote health and the health and wellbeing of others.	I understand and can demonstrate the qualities and required to sustain different types of relationships.		
I am aware of the need communication.	to respect personal space	and boundaries and can recogr	nise and respond appropriately to ve	rbal and non-verbal	

Appendix – Explanations

These provide definitions of terms or advice on particular experiences and outcomes.

Introductory statements

Resilience

The development of resilience or coping skills is particularly important to young people as increasing numbers are struggling through school and life with social and emotional needs that greatly challenge schools and welfare agencies.

A resilient child can resist adversity, cope with uncertainty and recover more successfully from traumatic events or episodes.

Mental, emotional, social and physical wellbeing

Mental wellbeing

Mental wellbeing refers to the health of the mind, the way we think, perceive, reflect on and make sense of the world.

Mental health

The World Health Organisation describes mental health as:

'a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.'

Emotional wellbeing

Emotional wellbeing refers to recognising, understanding and effectively managing our feelings and emotions.

Social wellbeing

Social wellbeing refers to being and feeling secure in relationships with family, friends and community, having a sense of belonging and recognising and understanding our contribution in society.

Social wellbeing – HWB 0-12a, etc

This will be developed by raising the young person's awareness, understanding and experience of participation in consultation, citizenship and volunteering activities within the formal and informal curriculum.

Self-esteem/Self worth

Self-esteem is a self rating of how well the self is doing. It means:

- the way we feel about ourselves
- the way we feel about our abilities
- the value we place on ourselves as human beings.

Physical wellbeing

Physical wellbeing refers to the knowledge, skills and attitudes that we need to understand how physical factors affect our health.

Physical wellbeing – HWB 0-18a, etc

This applies to all kinds of travel – whether on foot, bicycle, motor vehicle or public transport. To support the reduction of road accidents, it is the responsibility of all adults to teach and encourage good road safety practice and to reinforce this by modelling appropriate behaviour.

Particular attention should be paid at times of transition, especially during the transition from primary to secondary school, where there is a significant increase in road traffic accidents.

curriculum for excellence: literacy across learning

Literacy across learning Principles and practice

Language and literacy are of personal, social and economic importance. Our ability to use language lies at the centre of the development and expression of our emotions, our thinking, our learning and our sense of personal identity. Language is itself a key aspect of our culture. Through language, children and young people can gain access to the literary heritage of humanity and develop their appreciation of the richness and breadth of Scotland's literary heritage. Children and young people encounter, enjoy and learn from the diversity of language used in their homes, their communities, by the media and by their peers.

Literacy is fundamental to all areas of learning, as it unlocks access to the wider curriculum. Being literate increases opportunities for the individual in all aspects of life, lays the foundations for lifelong learning and work, and contributes strongly to the development of all four capacities of *Curriculum for Excellence*.

Competence and confidence in literacy, including competence in grammar, spelling and the spoken word, are essential for progress in all areas of the curriculum. Because of this, all teachers have responsibility for promoting language and literacy development. Every teacher in each area of the curriculum needs to find opportunities to encourage young people to explain their thinking, debate their ideas and read and write at a level which will help them to develop their language skills further.

Building the Curriculum 1

The literacy experiences and outcomes promote the development of critical and creative thinking as well as competence in listening and talking, reading, writing and the personal, interpersonal and team-working skills which are so important in life and in the world of work. The framework provides, for learners, parents and teachers, broad descriptions of the range of learning opportunities which will contribute to the development of literacy, including critical literacy.

What is meant by literacy?

In defining literacy for the 21st century we must consider the changing forms of language which our children and young people will experience and use. Accordingly, our definition takes account of factors such as the speed with which information is shared and the ways it is shared. The breadth of our definition is intended to 'future proof' it. Within *Curriculum for Excellence*, therefore, literacy is defined as:

the set of skills which allows an individual to engage fully in society and in learning, through the different forms of language, and the range of texts, which society values and finds useful.

The literacy experiences and outcomes promote the development of skills in using language, particularly those that are used regularly by everyone in their everyday lives. These include the ability to apply knowledge about language. They reflect the need for young people to be able to communicate effectively both face-to-face and in writing through an increasing range of media. They take account of national and international research and of other skills frameworks. They recognise the importance of listening and talking and of effective collaborative working in the development of thinking and in learning.

In particular, the experiences and outcomes address the important skills of critical literacy. Children and young people not only need to be able to read for information: they also need to be able to work out what trust they should place on the information and to identify when and how people are aiming to persuade or influence them.

How is the literacy framework structured?

The framework opens with a set of statements that describe the kinds of activity which all children and young people should experience throughout their learning to nurture their skills and knowledge in literacy and language. Teachers will use them, alongside the more detailed experiences and outcomes, in planning for learning and teaching.

The three organisers within the literacy framework are the same as those used in the literacy and English, literacy and Gàidhlig, Gaelic (learners) and modern languages frameworks:

- listening and talking
- reading
- writing.

Within these organisers there are a number of subdivisions.

Enjoyment and choice experiences and outcomes highlight the importance of providing opportunities for young people to make increasingly sophisticated choices.

The *tools* sections include important skills and knowledge: for example, in reading it includes such important matters as reading strategies and spelling.

The sections on *finding and using information* include, in reading, critical literacy skills; while the *understanding, analysing and evaluating* statements encourage progression in understanding of texts, developing not only literal understanding but also the higher order skills.

Finally, the *creating texts* experiences and outcomes describe the kind of opportunities which will help children and young people to develop their ability to communicate effectively, for example, by writing clear, well-structured explanations.

The statements of experiences and outcomes emphasise that learning is an *active* process: for example, the outcomes stress *making* notes, rather than the passive activity implied by *taking* notes. Experiences represent important continuing aspects of learning such as exploring and enjoying text, and outcomes describe stages in the development of skills and understanding.

The experiences and outcomes have been written in an inclusive way which will allow teachers to interpret them for the needs of individual children and young people who use Braille, sign language and other forms of communication. This is exemplified in the words 'engaging with others' and 'interacting' within the listening and talking outcomes.

The level of achievement at the fourth level has been designed to approximate to that associated with SCQF level 4.

Why are the literacy experiences and outcomes also published separately from the literacy and English and from the literacy and Gàidhlig frameworks?

The importance of the development of literacy skills across all areas of the curriculum is stressed in *Building the Curriculum 1*. All practitioners – from the early years, through primary and secondary education, in youth work settings and in colleges – are in a position to make important contributions to developing and reinforcing the literacy skills of children and young people, both through the learning activities which they plan and through their interaction with children and young people. Schools and their partners need to ensure a shared understanding of these responsibilities and that the approaches to learning and teaching will enable each child and young person to make good progress in developing their literacy skills. It is expected that the literacy experiences and outcomes, and this accompanying paper, will be read by a range of practitioners, including those who work in school library resource centres, who make an enormous contribution to the development of the literacy skills of children and young people.

What does this mean for learning and teaching?

For teachers and other practitioners, it means asking the question, 'How am I meeting the literacy needs of the learners in front of me?' It means thinking about the kinds of literacy experiences provided for young people. It doesn't mean that every practitioner will teach everything that a secondary English teacher does. These experiences will sometimes be provided through collaborative working with other departments; but the greatest impact for learners will come from all practitioners, in all learning environments, including rich literacy experiences as part of their day-to-day learning and teaching programmes.

What are broad features of assessment in literacy?

(This section complements the advice for literacy and English.)

As literacy is the responsibility of all staff, and because of the importance of literacy across all aspects of a young person's learning, all staff should be clear about their responsibilities and their roles in the assessment of literacy. Assessment in literacy will focus on children and young people's progress in developing and applying essential skills in listening and talking, reading and writing. From the early years to the senior stages, and particularly at times of transition, it is vital to have a clear picture of the progress each child and young person is making across all aspects of literacy so that further learning can be planned and action can be taken if any ground has been lost.

Within the overall approach to assessing literacy, evidence of progress in developing and applying skills in day-to-day learning across the curriculum will complement evidence gathered from language lessons. Specific assessment tasks will also have an important part to play. Practitioners and learners need a common understanding of expectations in literacy across all curriculum areas, and discussion and sharing examples of work will help to achieve this.

Approaches to assessment should identify the extent to which children and young people can apply their literacy skills across their learning. For example:

- How well do they contribute to discussions and openly explain their thinking?
- Are they increasingly able to distil key ideas from texts?
- Can they apply their literacy skills successfully in different areas of their learning and their daily lives?

Children will demonstrate their progress in *reading* through their growing fluency and understanding, and their increasing confidence in reading to learn as well as learning to read.

Literacy experiences and outcomes emphasise the development of *critical literacy*. Progress here can be seen as children move from dealing with straightforward information towards analysing, evaluating and being aware of the trust that they should place on evidence.

Children and young people will demonstrate their progress in *writing* though the degree of independence they show, the organisation and quality of their ideas, their skills in spelling, punctuation and grammar, the match of their writing to audience and the effectiveness of their use of language.

Progress in *listening and talking* can be assessed through their interactions in social and learning contexts and through using individual talks, presentations and group discussions. This range of sources will provide evidence about their confidence, their increasing awareness of others in sustaining interactions, the clarity of their ideas and expression and their skills in listening to others and taking turns.

Learners' enthusiasm and motivation for using language will show in their growing use of different media and texts, their preferences in reading, their confidence in sharing experiences through talk and writing and in the ways they apply their skills in their learning and communicating. These aspects will be indicators of their long-term success in using literacy in learning in their lives as citizens and in preparing for the world of work.

Where do I begin?

You might begin by asking yourself to what extent you already provide literacy experiences for learners. As a first step, you might want to consider the ways in which you use listening, talking, reading and writing for learning day to day in your teaching programmes. For example, do you provide learners with opportunities to:

Listening and talking for learning

- engage with others in group and class discussions of appropriate complexity?
- learn collaboratively for example, when problem-solving?
- explain their thinking to others?
- explore factors which influence them and persuade them in order to help them think about the reliability of information?

Reading for learning

- find, select, sort, summarise and link information from a variety of sources?
- consider the purpose and main concerns in texts, and understand the differences between fact and opinion?
- discuss similarities and differences between texts?

Writing for learning

- make notes, develop ideas and acknowledge sources in written work?
- develop and use effective vocabulary?
- create texts for example, presentations which allow learners to persuade/argue/explore ideas?

Where you answer 'yes' to these questions, you are contributing to the development of the literacy of the learners for whom you are responsible.

You will see that literacy is already reflected within the experiences and outcomes of the other curriculum area frameworks. It is important to use the literacy experiences and outcomes alongside those of the other curriculum areas when planning for learning.

What is meant by 'texts'?

It follows that the definition of 'texts' also needs to be broad and future proof. Therefore, within *Curriculum for Excellence*:

a text is the medium through which ideas, experiences, opinions and information can be communicated.

Reading and responding to literature and other texts play a central role in the development of learners' knowledge and understanding. Texts not only include those presented in traditional written or print form, but also orally, electronically or on film. Texts can be in continuous form, including traditional formal prose, or non-continuous, for example charts and graphs. The literacy framework reflects the increased use of multimodal texts, digital communication, social networking and the other forms of electronic communication encountered by children and young people in their daily lives. It recognises that the skills which children and young people need to learn to read these texts differ from the skills they need for reading continuous prose. Examples are given below.

Examples of texts
novels, short stories, plays, poems
reference texts
the spoken word
charts, maps, graphs and timetables
advertisements, promotional leaflets
comics, newspapers and magazines
CVs, letters and emails
films, games and TV programmes
labels, signs and posters
recipes, manuals and instructions
reports and reviews
text messages, blogs and social networking sites
web pages, catalogues and directories

In planning for learning in any curriculum area it is important for practitioners to ensure that children and young people encounter a wide range of different types of text in different media. As they progress in their learning, children and young people will encounter texts of increasing complexity in terms of length, structure, vocabulary, ideas and concepts.

Literacy Experiences and outcomes

The development of literacy skills plays an important role in all learning.

I develop and extend my literacy skills when I have opportunities to:

- communicate, collaborate and build relationships
- reflect on and explain my literacy and thinking skills, using feedback to help me improve and sensitively provide useful feedback for others
- engage with and create a wide range of texts¹ in different media, taking advantage of the opportunities offered by ICT
- develop my understanding of what is special, vibrant and valuable about my own and other cultures and their languages
- explore the richness and diversity of language², how it can affect me, and the wide range of ways in which I and others can be creative
- extend and enrich my vocabulary through listening, talking, watching and reading.

¹ Texts are defined in the principles and practice paper. They will include texts which are relevant to all areas of learning, and examples of writing by Scottish authors which relate to the history, heritage and culture of the world. They may also include writing in Scots, and Gaelic in translation.

² The languages of the world will include the languages which children and young people bring to the classroom and other settings.

Listening and talking							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Enjoyment and choice	I enjoy exploring and playing with the patterns and sounds of language, and can use what I learn. I enjoy exploring and choosing stories and other texts to watch, read or listen to, and can share my likes and dislikes. I enjoy exploring events and characters in stories and other texts, sharing my thoughts in different ways.	I regularly select and liste enjoy and find interesting prefer certain sources. I regularly select subject, resources to create texts	purpose, format and	I regularly select and listen to or w and interest, and I can express ho and expectations, and I can give r my personal response. I can regularly select subject, purp to create texts of my choice, and a style.	w well they meet my needs easons, with evidence, for bose, format and resources		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Tools for listening and talking - to help me when interacting or presenting within and beyond my place of learning	As I listen and talk in different situations, I am learning to take turns and am developing my awareness of when to talk and when to listen.	When I engage with others, I know when and how to listen, when to talk, how much to say, when to ask questions and how to respond with respect.	When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking.	 When I engage with others, I can make a relevant contribution, encourage others to contribute and acknowledge that they have the right to hold a different opinion. I can respond in ways appropriate to my role and use contributions to reflect on, clarify or adapt thinking. 	 When I engage with others can make a relevant contribution, ensure that everyone has an opportunity to contribute and encourage them to take account of others' points of view or alternative solutions. I can respond in ways appropriate to my role, exploring and expanding on contributions to reflect on, clarify or adapt thinking.

Listening and ta	Iking (continued)				
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Finding and using information	I listen or watch for useful or interesting information and I use this to make choices or learn new things.	As I listen or watch, I can identify and discuss the purpose, key words and main ideas of the text, and use this information for a specific purpose.	As I listen or watch, I can identify and discuss the purpose, main ideas and supporting detail contained within the text, and use this information for different purposes.	 As I listen or watch, I can: identify and give an accurate account of the purpose and main concerns of the text, and can make inferences from key statements identify and discuss similarities and differences between different types of text use this information for different purposes. 	 As I listen or watch, I can: clearly state the purpose and main concerns of a text and make inferences from key statements compare and contrast different types of text gather, link and use information from different sources and use this for different purposes.
		As I listen or watch, I am learning to make notes under given headings and use these to understand what I have listened to or watched and create new texts.	As I listen or watch, I can make notes, organise these under suitable headings and use these to understand ideas and information and create new texts, using my own words as appropriate.	As I listen or watch, I can make develop thinking, help retain ar issues and create new texts, u appropriate.	nd recall information, explore
		I can select ideas and relevant information, organise these in a logical sequence and use words which will be interesting and/or useful for others.	I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience.	I can independently select ideas and relevant information different purposes, organise essential information or ideas and any supporting detail in a logical order, and use suita vocabulary to communicate effectively with my audience.	

Listening and ta	Listening and talking (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Understanding, analysing and evaluating - investigating and/or appreciating texts with increasingly complex ideas, structures and specialist vocabulary for different purposes	To help me understand stories and other texts, I ask questions and link what I am learning with what I already know.	I can show my understanding of what I listen to or watch by responding to and asking different kinds of questions.	I can show my understanding of what I listen to or watch by responding to literal, inferential, evaluative and other types of questions, and by asking different kinds of questions of my own.	I can show my understanding of what I listen to or watch by commenting, with evidence, on the content and form of short and extended texts.	I can show my understanding of what I listen to or watch by giving detailed, evaluative comments, with evidence, about the content and form of short and extended texts.			
		To help me develop an informed view, I am learning to recognise the difference between fact and opinion.	To help me develop an informed view, I can distinguish fact from opinion, and I am learning to recognise when my sources try to influence me and how useful these are.	To help me develop an informed view, I am learning about the techniques used to influence opinion and how to assess the value of my sources, and I can recognise persuasion.	To help me develop an informed view, I can identify some of the techniques used to influence or persuade and can assess the value of my sources.			

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Creating texts - applying the elements others use to create different types of short and extended texts with increasingly complex ideas, structures and vocabulary	Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message. I enjoy exploring events and characters in stories and other texts and I use what I learn to invent my own, sharing these with others in imaginative ways.	When listening and talking with others for different purposes, I can exchange information, experiences, explanations, ideas and opinions, and clarify points by asking questions or by asking others to say more.	 When listening and talking with others for different purposes, I can: share information, experiences and opinions explain processes and ideas identify issues raised and summarise main points or findings clarify points by asking questions or by asking others to say more. 	 When listening and talking with others for different purposes, I can: communicate information, ideas or opinions explain processes, concepts or ideas identify issues raised, summarise findings or draw conclusions. 	 When listening and talking with others for different purposes, I can: communicate detailed information, ideas or opinions explain processes, concepts or ideas with some relevant supportin detail sum up ideas, issues, findings or conclusions.
	As I listen and take part in conversations and discussions, I discover new words and phrases which I use to help me express my ideas, thoughts and feelings.	I can communicate clearly when engaging with others within and beyond my place of learning, using selected resources ³ as required.	I am developing confidence when engaging with others within and beyond my place of learning. I can communicate in a clear, expressive way and I am learning to select and organise resources independently.		I can communicate in a clear expressive manner when engaging with others within and beyond my place of learning, and can independently select and organise appropriate resources as required.

³ This may include images, objects, audio, visual or digital resources.

Reading						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Enjoyment and choice – within a motivating and challenging environment, developing an awareness of the relevance of texts in my life	I enjoy exploring and playing with the patterns and sounds of language and can use what I learn. I enjoy exploring and choosing stories and other texts to watch, read or listen to, and can share my likes and dislikes.	I regularly select and read, listen to or watch texts which I enjoy and find interesting, and I can explain why I prefer certain texts and authors.		I regularly select and read, listen to or watch texts for enjoyment and interest, and I can express how well they meet my needs and expectations and give reasons, with evidence, for my personal response. I can identify sources ⁴ to develop the range of my reading.	I regularly select and read, listen to or watch texts for enjoyment and interest, and I can express how well they meet my needs and expectations and give reasons, with evidence, for my personal response. I can independently identify sources to develop the range of my reading.	
Tools for reading – to help me use texts with increasingly complex or unfamiliar ideas, structures and vocabulary within and beyond my place of learning	I explore sounds, letters and words, discovering how they work together, and I can use what I learn to help me as I read and write.	I am learning to select and use strategies and resources before I read, and as I read, to help make the meaning of texts clear.	I can select and use a range of strategies and resources before I read, and as I read, to make meaning clear and give reasons for my selection.	I can select and use the strategies and resources I find most useful before I read, and as I read, to monitor and check my understanding.	Before and as I read, I can apply strategies and use resources independently to help me read a wide variety of texts and/or find the information I need.	

⁴ Sources should be interpreted in the broadest sense, for example, traditional sources such as libraries and also the full range of digital and interpersonal opportunities to learn about texts.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Finding and using information – when reading and using fiction and non- fiction texts with increasingly complex ideas, structures and specialist vocabulary	I use signs, books or other texts to find useful or interesting information and I use this to plan, make choices or learn new things.	Using what I know about the features of different types of texts, I can find, select, sort and use information for a specific purpose.	Using what I know about the features of different types of texts, I can find, select and sort information from a variety of sources and use this for different purposes.	Using what I know about the fe texts, I can find, select, sort, su information from different sour	ummarise, link and use
		I am learning to make notes under given headings and use them to understand information, explore ideas and problems and create new texts.	I can make notes, organise them under suitable headings and use them to understand information, develop my thinking, explore problems and create new texts, using my own words as appropriate.	I can make notes and organise them to develop my thinking help retain and recall information, explore issues and create new texts, using my own words as appropriate.	
Understanding, analysing and evaluating - investigating and/or appreciating fiction and non-fiction texts with increasingly complex ideas, structures and specialist vocabulary for different purposes	To help me understand stories and other texts, I ask questions and link what I am learning with what I already know.	To show my understanding across different areas of learning, I can identify and consider the purpose and main ideas of a text.	To show my understanding across different areas of learning, I can identify and consider the purpose and main ideas of a text and use supporting detail.	 To show my understanding across different areas of learning, I can: identify and consider the purpose, main concerns or concepts and use supporting detail make inferences from key statements identify and discuss similarities and differences between different types of text. 	 To show my understanding across different areas of learning, I can: clearly state the purpose main concerns, concepts or arguments and use supporting detail make inferences from key statements and state these accurately in my own words compare and contrast different types of text.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Understanding, analysing and evaluating (continued) - investigating and/or appreciating fiction and non-fiction texts with increasingly complex ideas, structures and specialist vocabulary for different purposes	I enjoy exploring	To help me develop an informed view, I can recognise the difference between fact and opinion.	To help me develop an informed view, I can identify and explain the difference between fact and opinion, recognise when I am being influenced, and have assessed how useful and believable my sources are.	To help me develop an informed view, I am exploring the techniques used to influence my opinion. I can recognise persuasion and assess the reliability of information and credibility and value of my sources.	To help me develop an informed view, I can recognise persuasion and bias, identify some of the techniques used to influence my opinion, and assess the reliability of information and credibility and value of my sources.
	events and characters in stories and other texts, sharing my thoughts in different ways.				

Writing							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Enjoyment and choice - within a motivating and challenging environment, developing an awareness of the relevance of texts in my life	I enjoy exploring and playing with the patterns and sounds of language and can use what I learn.		my choice and I regularly format and resources to suit ce.	I enjoy creating texts of my choice own style. I can regularly select so resources to suit the needs of my	ubject, purpose, format and		

Writing (continued)						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Tools for writing – using knowledge of technical aspects to help my writing communicate effectively within and beyond my place of learning	I explore sounds, letters and words, discovering how they work together, and I can use what I learn to help me as I read or write.	I can spell the most commonly-used words, using my knowledge of letter patterns and spelling rules and use resources to help me spell tricky or unfamiliar words.	I can spell most of the words I need to communicate, using spelling rules, specialist vocabulary, self-correction techniques and a range of resources.	I can use a range of strategies and resources and spell most of the words I need to use, including specialist vocabulary, and ensure that my spelling is accurate.	I can use a range of strategies and resources independently and ensure that my spelling, including specialist vocabulary, is accurate.	
	As I play and learn, I enjoy exploring interesting materials for writing and different ways of recording my experiences and feelings, ideas and information.	I can write independently, use appropriate punctuation and order and link my sentences in a way that makes sense.	In both short and extended texts, I can use appropriate punctuation, vary my sentence structures and divide my work into paragraphs in a way that makes sense to my reader.	As appropriate to my purpose punctuate and structure differe sufficient accuracy, and arrang clear, showing straightforward paragraphs.	nt types of sentences with the these to make meaning	
		Throughout the writing process, I can check that my writing makes sense.	Throughout the writing process, I can check that my writing makes sense and meets its purpose.	Throughout the writing process, I can review and edit my writing to ensure that it meets its purpose and communicates meaning at first reading.	Throughout the writing process, I can review and edit my writing independently to ensure that it meets its purpose and communicates meaning clearly at first reading.	

Writing (continued)						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Tools for writing (continued)		I can present my writing in a way that will make it legible and attractive for my reader, combining words, images and other features.	I consider the impact that layout and presentation will have and can combine lettering, graphics and other features to engage my reader.	I can consider the impact that layout and presentation will have on my reader, selecting and using a variety of features appropriate to purpose and audience.	I can justify my choice and use of layout and presentation in terms of the intended impact on my reader.	

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Organising and using information		I am learning to use my notes and other types of writing to help me understand information and ideas, explore problems, generate and develop ideas or create new text.	I can use my notes and other types of writing to help me understand information and ideas, explore problems, make decisions, generate and develop ideas or create new text. I recognise the need to acknowledge my sources and can do this appropriately.	I can use notes and other types of writing to generate and develop ideas, retain and recall information, explore problems, make decisions, generate and develop ideas or create original text. I recognise when it is appropriate to quote from sources and when I should put points into my own words. I can acknowledge my sources appropriately.	I can use notes and other types of writing to generate and develop ideas, retain and recall information, explore problems, make decisions, or create original text. I can make appropriate and responsible use of sources and acknowledge these appropriately.
	Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message.	By considering the type of text I am creating, ⁵ I can select ideas and relevant information, organise these in a logical sequence and use words which will be interesting and/or useful for others.	By considering the type of text I am creating, I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience.	By considering the type of text I am creating, I can independently select ideas and relevant information for different purposes, and organise essential information or ideas and any supporting detail in a logical order. I can us suitable vocabulary to communicate effectively with my audience.	

⁵ These will include the range of texts and media described in the principles and practice paper.

Writing (continued)	Vriting (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Creating texts - applying the elements which writers use to create different types of short and extended texts with increasingly complex ideas, structures and vocabulary I enjoy exploring events and characters in stories and other texts and I use what I learn to invent my own, sharing these with others in imaginative ways.		information, describe events or processes, share my opinions or persuade my reader in different ways. I can persi explore iss opinion us	I can convey information, describe events, explain processes or combine ideas in different ways.	I can convey information, describe events, explain processes or concepts, and combine ideas in different ways.	I can convey information and describe events, explain processes or concepts, providing substantiating evidence, and synthesise ideas or opinions in different ways.			
			I can persuade, argue, explore issues or express an opinion using relevant supporting detail and/or evidence.	I can persuade, argue, evaluate, explore issues or express an opinion using a clear line of thought, relevant supporting detail and/or evidence.	I can persuade, argue, evaluate, explore issues or express and justify opinions within a convincing line of thought, using relevant supporting detail and/or evidence.			

curriculum for excellence: numeracy across learning

Numeracy across learning Principles and practice

All teachers have responsibility for promoting the development of numeracy. With an increased emphasis upon numeracy for all young people, teachers will need to plan to revisit and consolidate numeracy skills throughout schooling.

Building the Curriculum 1

All schools, working with their partners, need to have strategies to ensure that all children and young people develop high levels of numeracy skills through their learning across the curriculum. These strategies will be built upon a shared understanding amongst staff of how children and young people progress in numeracy and of good learning and teaching in numeracy. Collaborative working with colleagues within their own early years setting, school, youth work setting or college and across sectors will support staff in identifying opportunities to develop and reinforce numeracy skills within their own teaching activities.

What does it mean to be numerate?

Being numerate helps us to function responsibly in everyday life and contribute effectively to society. It increases our opportunities within the world of work and establishes foundations which can be built upon through lifelong learning. Numeracy is not only a subset of mathematics; it is also a life skill which permeates and supports all areas of learning, allowing young people access to the wider curriculum.

We are numerate if we have developed:

the confidence and competence in using number which will allow individuals to solve problems, analyse information and make informed decisions based on calculations.

A numerate person will have acquired and developed fundamental skills and be able to carry out number processes but, beyond this, being numerate also allows us to access and interpret information, identify possibilities, weigh up different options and decide on which option is most appropriate.

Numeracy is a skill for life, learning and work. Having well-developed numeracy skills allows young people to be more confident in social settings and enhances enjoyment in a large number of leisure activities. For these and many other reasons, all teachers have important parts to play in enhancing the numeracy skills of all children and young people.

Numerate people rely on the accumulation of knowledge, concepts and skills they have developed, and continually revisit and add to these. All practitioners, as they make use of the statements of experiences and outcomes to plan learning, will ensure that the numeracy skills developed from early levels and beyond are revisited and refreshed throughout schooling and into lifelong learning.

How are the numeracy experiences and outcomes structured?

The numeracy experiences and outcomes have been structured using eight organisers:

- Estimation and rounding
- Number and number processes
- Fractions, decimal fractions and percentages
- Money
- Time
- Measurement
- Data and analysis
- Ideas of chance and uncertainty.

All of these areas of numeracy will be familiar and all teachers will recognise how they impact on their own lives. Reflecting on this will help teachers to identify where opportunities may exist to develop numeracy for children and young people.

Mathematics is not my specialism. How will I contribute to the development of numeracy skills?

For individual teachers in secondary schools and other practitioners, it means asking the question, 'How am I meeting the numeracy needs of the learners in front of me?'. This does not mean that you will teach everything that a mathematics teacher develops but that you think of the numeracy experiences you can provide for young people. The greatest impact for learners will come where all practitioners, in all learning environments, include rich numeracy experiences as part of their day-to-day learning and teaching programmes.

You might begin by asking to what extent you already provide numeracy experiences for learners. As a first step, you may want to consider where numeracy plays a part in the aspects you contribute to the curriculum. Does your programme involve estimating, measuring, using and managing time, carrying out money calculations? Does it involve reading information from charts and tables or explaining consequences of actions? If it does, and you highlight this and build upon it in the learning activities, you are making a valuable contribution to developing numeracy in all learners.

What are the features of effective learning and teaching in numeracy?

The experiences and outcomes promote and support effective learning and teaching methodologies which will stimulate the interest of children and young people and promote creativity and ingenuity.

A rich and supportive learning environment will support a skilful mix of a variety of approaches, including:

- active learning and planned, purposeful play
- development of problem-solving capabilities
- developing mental agility
- frequently asking children to explain their thinking
- use of relevant contexts and experiences, familiar to children and young people
- using technology in appropriate and effective ways
- building on the principles of Assessment is for Learning, including understanding the purpose and relevance of the activities
- both collaborative and independent learning
- making frequent links across the curriculum, so that concepts and skills are developed further by being applied in different, relevant contexts
- promoting an interest and enthusiasm for numeracy.

Teachers will plan to establish and consolidate children's fundamental numeracy skills using imaginative, interactive approaches, so that young people develop a sound understanding of number. Through such approaches they will grow in confidence in recall and use of number bonds and multiplication facts, in their understanding of place-value, and in the application of mental strategies. Teachers will reinforce these skills continually throughout the education of each child and young person.

How can I promote progression in children and young people's development of numeracy skills? How do I know which numerical skills I should develop and that they are at an appropriate level?

Children and young people will most effectively develop their numeracy through cumulative growth in their understanding of key concepts and the application of their skills in new contexts. There are fundamental points of learning along these 'pathways of progression': these allow teachers to identify the progression within a child or young person's understanding and what his or her next steps in development will be. It is essential for teachers to work together to extend their shared understanding of progression.

The statements of experiences and outcomes do not have ceilings, so that all children and young people can be challenged at an appropriate level. Collaboration with colleagues in relation to pathways of progression will encourage a shared understanding of expectations of standards as well as effective learning and teaching within numeracy.

Shared planning for the contexts in which children and young people learn and apply numeracy skills is also crucial. Children and young people need opportunities to bring together different combinations of numeracy skills from the various lines of progression. High quality learning depends upon achieving a suitable balance between developing key facts and integrating and applying them in relevant and imaginative contexts.

Have we raised the bar in the expectations for numeracy?

Our expectations for numeracy are indeed higher than previously. This is because of the increasing recognition that we must raise levels of performance in numeracy and sustain them throughout lifelong learning. Many other countries are raising the numeracy performance of their children, young people and wider population. The world needs to perform at the highest level, so raising the bar in numeracy is important for each individual and also for the prosperity of the nation.

To support this, experiences and outcomes without ceilings should ensure young people are challenged at an appropriate level and are given the opportunity to progress at a suitably aspirational pace. The level of achievement at the fourth level has been designed to approximate to that associated with SCQF level 4.

This paper and the experiences and outcomes in numeracy provide a clear statement of the expectations that will support all practitioners in contributing confidently to the important responsibility which we all share for developing the numeracy skills of our children and young people.

What are broad features of assessment in numeracy?

(This section complements the advice for mathematics and numeracy.)

As numeracy is the responsibility of all staff, and because of the importance of numeracy across all aspects of a young person's learning, all staff should be clear about their responsibilities and their roles in the assessment of numeracy. Assessment will focus on how well children and young people can work with numbers and data and how well they can use them in their learning and lives, including preparation for future work. From the early years to the senior stages, and particularly at times of transition, it is vital to have a clear picture of the progress each child and young person is making across all aspects of numeracy so that further learning can be planned and action can be taken if any ground has been lost.

Teachers can gather evidence of progress as part of day-to-day learning both in mathematics classes and across the curriculum. The use of specific assessment tasks will be important in assessing progress at key points of learning. Children and young people's progress will be seen in their skills in using number to solve problems, in analysing information and in making informed decisions based on calculations. Approaches to assessment should identify the extent to which children and young people can apply these skills in their learning in and beyond the classroom, in their daily lives and in preparing for the world of work.

As children and young people gradually build up the concepts and skills contained in the experiences and outcomes, they will demonstrate their competence and confidence in applying them in a number of ways. For example:

- Can they explain their thinking to show their understanding of number processes and concepts?
- Are they developing securely the full range of the skills and attributes set out within the experiences and outcomes? As they apply these to problems, can they draw on skills and concepts learned previously?
- As they tackle problems in unfamiliar contexts, can they confidently identify which skills and concepts are relevant to the problem? Can they then apply their skills accurately when working independently and with others, and can they then evaluate their solutions?
- Are they developing their understanding of personal finance?
- Can they evaluate data to make informed decisions?
- Are they developing the capacity to engage with and complete tasks and assignments?

Assessment of numeracy across learning, within and outside the classroom, offers children and young people opportunities to practise and extend their skills, for example within enterprise activities, social studies, technologies and science.

Numeracy Experiences and outcomes

My learning in numeracy enables me to:

- develop essential numeracy skills which will allow me to participate fully in society
- understand that successful independent living requires financial awareness, effective money management, using schedules and other related skills
- interpret numerical information appropriately and use it to draw conclusions, assess risk, make reasoned evaluations and informed decisions
- apply skills and understanding creatively and logically to solve problems, within a variety of contexts
- appreciate how the imaginative and effective use of technologies can enhance the development of skills and concepts.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Estimation and rounding	I am developing a sense of size and amount by observing, exploring, using and communicating with others about things in the world around me.	I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate.	I can use my knowledge of rounding to routinely estimate the answer to a problem, then after calculating, decide if my answer is reasonable, sharing my solution with others.	I can round a number using an appropriate degree of accuracy, having taken into account the context of the problem.	Having investigated the practical impact of inaccuracy and error, I can use my knowledge of tolerance when choosing the required degree of accuracy to make real-life calculations
Number and number processes including addition, subtraction, multiplication, division and negative numbers	I have explored numbers, understanding that they represent quantities and I can use them to count, create sequences and describe order.	I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value.	I have extended the range of whole numbers I can work with and having explored how decimal fractions are constructed, can explain the link between a digit, its place and its value.		

Number, money	and measure (cor	ntinued)			
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
number processes including addition, subtraction, multiplication, division my	I use practical materials and can 'count on and back' to help me to understand addition and subtraction, recording my ideas and solutions in different ways.	I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed.	Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others. I have explored the contexts in which problems involving decimal fractions occur and can solve related problems using a variety of methods.	I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions. I can continue to recall number facts quickly and use them accurately when making calculations.	Having recognised similarities between new problems and problems I have solved before, I can carry out the necessary calculations to solve problems set in unfamiliar contexts.
			I can show my understanding of how the number line extends to include numbers less than zero and have investigated how these numbers occur and are used.	I can use my understanding of numbers less than zero to solve simple problems in context.	

Number, money	Number, money and measure (continued)						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Fractions, decimal fractions and percentages including ratio and proportion	I can share out a group of items by making smaller groups and can split a whole object into smaller parts.	 Having explored fractions by taking part in practical activities, I can show my understanding of: how a single item can be shared equally the notation and vocabulary associated with fractions where simple fractions lie on the number line. Through exploring how groups of items can be shared equally, I can find a fraction of an amount by applying my knowledge of division. 	I have investigated the everyday contexts in which simple fractions, percentages or decimal fractions are used and can carry out the necessary calculations to solve related problems.	I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real-life situations.	I can choose the most appropriate form of fractions decimal fractions and percentages to use when making calculations mentall in written form or using technology, then use my solutions to make comparisons, decisions and choices.		
				I can show how quantities that are related can be increased or decreased proportionally and apply this to solve problems in everyday contexts.	Using proportion, I can calculate the change in one quantity caused by a chang in a related quantity and solve real-life problems.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Money	I am developing my awareness of how money is used and can recognise and use a range of coins.	I can use money to pay for items and can work out how much change I should receive. I have investigated how different combinations of coins and notes can be used to pay for goods or be given in change.	I can manage money, compare costs from different retailers, and determine what I can afford to buy. I understand the costs, benefits and risks of using bank cards to purchase goods or obtain cash and realise that budgeting is important. I can use the terms profit and loss in buying and selling activities and can make simple calculations for this.	When considering how to spend my money, I can source, compare and contrast different contracts and services, discuss their advantages and disadvantages, and explain which offer best value to me. I can budget effectively, making use of technology and other methods, to manage money and plan for future expenses.	I can discuss and illustrate the facts I need to consider when determining what I car afford, in order to manage credit and debt and lead a responsible lifestyle. I can source information on earnings and deductions and use it when making calculations to determine ne income. I can research, compare and contrast a range of personal finance products and, after making calculations, explain my preferred choices.

Number, mone	Number, money and measure (continued)						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Time	I am aware of how routines and events in my world link with times and seasons, and have explored ways to record and display these using clocks, calendars and other methods.	I can tell the time using 12 hour clocks, realising there is a link with 24 hour notation, explain how it impacts on my daily routine and ensure that I am organised and ready for events throughout my day. I can use a calendar to plan and be organised for key events for myself and my class throughout the year. I have begun to develop a sense of how long tasks take by measuring the time taken to complete a range of activities using a variety of timers.	I can use and interpret electronic and paper-based timetables and schedules to plan events and activities, and make time calculations as part of my planning. I can carry out practical tasks and investigations involving timed events and can explain which unit of time would be most appropriate to use. Using simple time periods, I can give a good estimate of how long a journey should take, based on my knowledge of the link between time, speed and distance.	Using simple time periods, I can work out how long a journey will take, the speed travelled at or distance covered, using my knowledge of the link between time, speed and distance.	I can research, compare and contrast aspects of time and time management as they impact on me. I can use the link between time, speed and distance to carry out related calculations.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Measurement	I have experimented with everyday items as units of measure to investigate and compare sizes and amounts in my environment, sharing my findings with others.	I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. I can estimate the area of a shape by counting squares or other methods.	I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure. I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems. I can explain how different methods can be used to find the perimeter and area of a simple 2D shape or volume of a simple 3D object.	I can solve practical problems by applying my knowledge of measure, choosing the appropriate units and degree of accuracy for the task and using a formula to calculate area or volume when required.	I can apply my knowledge and understanding of measure to everyday problems and tasks and appreciate the practical importance of accuracy whe making calculations.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Data and analysis	I can collect objects and ask questions to gather information, organising and displaying my findings in different ways. I can match objects, and sort using my own and others' criteria, sharing my ideas with others. I can use the signs and charts around me for information, helping me plan and make choices and decisions in my daily life.	I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria.	Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading. I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way.	I can work collaboratively, making appropriate use of technology, to source information presented in a range of ways, interpret what it conveys and discuss whether I believe the information to be robust, vague or misleading.	I can evaluate and interpret raw and graphical data using a variety of methods, comment on relationships I observe within the data and communicate my findings to others.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Ideas of chance and uncertainty		I can use appropriate vocabulary to describe the likelihood of events occurring, using the knowledge and experiences of myself and others to guide me.	I can conduct simple experiments involving chance and communicate my predictions and findings using the vocabulary of probability.	I can find the probability of a simple event happening and explain why the consequences of the event, as well as its probability, should be considered when making choices.	By applying my understanding of probability, I can determine how many times I expect an event to occur, and use this information to make predictions, risk assessment informed choices and decisions.

curriculum for excellence: curriculum areas

Expressive arts Health and wellbeing Languages Mathematics Religious and moral education Sciences Social studies Technologies

curriculum for excellence: expressive arts

Expressive arts Principles and practice

What can learning in the expressive arts achieve for children and young people?

The inspiration and power of the arts play a vital role in enabling our children and young people to enhance their creative talent and develop their artistic skills.

By engaging in experiences within the expressive arts, children and young people will recognise and represent feelings and emotions, both their own and those of others. The expressive arts play a central role in shaping our sense of our personal, social and cultural identity. Learning in the expressive arts also plays an important role in supporting children and young people to recognise and value the variety and vitality of culture locally, nationally and globally.

Learning in, through and about the expressive arts enables children and young people to:

- be creative and express themselves in different ways
- experience enjoyment and contribute to other people's enjoyment through creative and expressive performance and presentation
- develop important skills, both those specific to the expressive arts and those which are transferable
- develop an appreciation of aesthetic and cultural values, identities and ideas and, for some,
- prepare for advanced learning and future careers by building foundations for excellence in the expressive arts.

Building the Curriculum 1 [amended]

The expressive arts are rich and stimulating, with the capacity to engage and fascinate learners of all ages, interests and levels of skill and achievement. It is therefore important that all teachers and educators look for opportunities within their own teaching approaches for interdisciplinary learning and to foster partnerships with professional arts companies, creative adults and cultural organisations.

How is the expressive arts framework structured?

The expressive arts experiences and outcomes will support staff in planning challenging, inspirational and enjoyable learning and teaching activities. The initial statements are closely linked to the four capacities and can be used to help to plan a wide range of learning activities, which will enable our young people to become:

- **successful learners**, who can express themselves, think innovatively, meet challenges positively and find imaginative solutions to problems and who have developed knowledge and skills related to the different arts and broader skills such as the use of technologies
- **confident individuals**, who have developed self-awareness, self-discipline, determination, commitment and confidence through drawing on their own ideas, experiences and feelings, and through successful participation
- **responsible citizens**, who can explore ethical questions, respond to personal and social issues, and develop stances and views, who have deepened their insight and experiences of cultural identities and who have come to recognise the importance of the arts to the culture and identities of other societies
- **effective contributors**, who can develop and express their creativity, work cooperatively and communicate with others and, in so doing, show initiative, dependability, leadership and enterprise.

The framework then begins with experiences and outcomes for presentation and performance across the expressive arts, followed by the experiences and outcomes in:

- art and design
- dance
- drama
- music.

This framework provides children and young people with opportunities to be creative and imaginative, to experience inspiration and enjoyment and to develop skills in each of these areas. Participation enables children and young people to experience and enjoy the energy and excitement of performing and presenting for different audiences and of being part of an audience for others.

The experiences and outcomes from each of the lines of development are complementary and interrelated and should be considered together when planning for learning.

The experiences and outcomes do not place ceilings on aspirations for progress and development. Through them, all learners, including those with particular skills, talents and interests and those with additional support needs, will have opportunities to nurture and develop their interests and skills.

What are the features of effective learning and teaching in the expressive arts?

The framework of experiences and outcomes supports staff in meeting the needs of children and young people through providing a wide range of carefully planned, well-paced learning experiences.

Within a rich, supportive environment teachers will draw upon a skilful mix of approaches to promote a climate of creativity and innovation, including:

- active involvement in creative activities and performances
- tasks or performance opportunities which require a creative response
- opportunities to perform or present to an audience
- partnerships with professional performers or artists and other creative adults
- raising awareness of contemporary culture and connecting with young people's experiences
- appropriate, effective use of technology
- building on the principles of Assessment is for Learning
- both collaborative and independent learning
- establishing links within the expressive arts subjects and with the wider curriculum
- opportunities to analyse, explore and reflect.

The majority of activities in the expressive arts involve creating and presenting and are practical and experiential. Evaluating and appreciating are an integral part of the creative process and are linked to developing creative skills, knowledge and understanding and enhancing enjoyment.

How will we build on children and young people's prior learning in the expressive arts?

Children and young people will come to their learning in the expressive arts with a range of different types and levels of experiences gained within and beyond the life of the school. Teachers will plan activities that take into account prior learning, achievement and interests.

At early to third level children and young people will enjoy activities that centre on expressing ideas, thoughts and feelings through creativity and self-expression. Development of skills is directly linked with opportunities for presenting and performing. Taken together, these experiences and outcomes from early to third level represent a broad general education in the expressive arts for all children and young people. With this in mind, the framework at the third level includes the expectation that each young person will enjoy the opportunity to contribute to a public presentation or performance in art and design, dance, drama or music, as a significant culmination of his or her broad general education. Similarly, some of the third level outcomes draw together learning from two or three related lines of development into a single outcome before expanding into the fourth level.

Fourth level experiences and outcomes provide a basis for more advanced study and further scope for depth, challenge, enjoyment, personalisation and choice. Teachers have scope to plan and organise different combinations of these experiences and outcomes, both within and between aspects of the expressive arts, to meet the varied needs and interests of young people who choose to progress beyond third level. The level of achievement at fourth level has been designed to approximate to that associated with SCQF Level 4.

At all levels children and young people will develop new skills and consolidate prior learning. Some of these skills (such as skills of communication, evaluation and leadership) are transferable while others (such as specific performance and technical skills) are specific to one or more of the expressive arts.

Teachers are responsible for ensuring that those with particular skills, talents and interests in one or more of the expressive arts have access to and can participate in arts experiences that accelerate, challenge and enrich their learning. This will include opportunities for some learners to build skills and qualities which will lead to their employment in the creative industries sector.

What are broad features of assessment in the expressive arts?

Assessment in the expressive arts will focus on children and young people's skills and abilities to express themselves through creating, presenting, evaluating and appreciating. Approaches to assessment will also include a focus on their abilities to recognise, present and discuss their own feelings and emotions and those of others.

Teachers will gather evidence of progress as part of children and young people's day-to-day learning in art and design, dance, drama and music. They will also make use of specific assessment tasks in assessing some aspects of learning. From the early years through to the senior stages, children and young people will demonstrate their progress in developing their skills as they work individually and with others in creative activities including, for example, presentations to others. Discussions with learners and observations of their responses can support teachers and practitioners in the challenge of assessing learners' creative and aesthetic processes. Evidence of progress will also be demonstrated through learners' abilities and skills in communicating in different ways and settings, solving problems creatively, and justifying their opinions of their own and others' work.

Approaches to assessment should identify the extent to which children and young people can apply these skills in their learning and their daily lives and in preparing for the world of work. For example:

- How well do they demonstrate appreciation and understanding of cultural identity?
- Do they show awareness of the role and impact of creative arts on people's lifelong interest and enjoyment of the expressive arts?

Children and young people can demonstrate their progress in skills, knowledge and understanding as they develop their practical skills and express increasingly complex concepts and ideas. For example, they:

- apply their creative skills to produce and perform more complex pieces of work and to recognise creativity and skill in the work of other people
- demonstrate increasing skills and confidence in presentations and performances, and in appreciation
 of how the expressive arts relate to the wider world and different cultures
- show enjoyment of the expressive arts, for example through evaluating constructively their own work and that of others, and suggesting how it can be improved.

Assessment should also link with other areas of the curriculum within and outside the classroom and, for example, offer children and young people opportunities to become aware of the role of professional arts companies and cultural organisations in society and the economy.

How are the expressive arts connected with the other areas of the curriculum?

Learning in the expressive arts offers rich and exciting opportunities for interdisciplinary work across art and design, dance, drama and music and with other areas of the curriculum. Ready examples include the opportunities for collaboration with technologies afforded by the study of design in a variety of contexts. As participation in dance activities contributes to children and young people's physical activity, experiences and outcomes in dance can be readily linked with those for physical education. Moving image media provides opportunities to explore dance, drama, music, art and design within another narrative medium and to combine these traditional expressive arts in film-making work.

Children and young people will develop, enhance and apply skills gained in the expressive arts in a very broad range of activities including role play, participation in whole school events, community events and outdoor learning. Such activities promote the development of skills in areas such as talking and working with others, and contribute greatly to children and young people's mental, emotional, social and physical wellbeing.

How do the expressive arts provide children and young people with insight and experiences of Scotland's distinctive cultural identities?

Learning in the expressive arts helps learners develop their knowledge, understanding and appreciation of contemporary and historical arts within their own communities. Children and young people will enjoy numerous and diverse opportunities to contribute to, reflect on and respond to the arts within their own and other cultures.

How important is inspiration and enjoyment?

One of the main purposes of learning in the expressive arts is to develop lifelong appreciation of, and participation in, expressive arts and cultural activities. The framework therefore includes not only statements of the intended outcomes of learning but also statements of experiences which provide opportunities for inspiration and enjoyment.

Judgements about learning will be based on evidence derived from a broad range of sources and across a range of activities and will refer to the learner's progress over time. High quality learning experiences will generate inspiration and enjoyment which will motivate and support effective learning.

How can the expressive arts contribute to the curriculum in its broadest sense?

Through their involvement in the expressive arts, all children and young people can express themselves in innovative, motivating ways, and experience enjoyment and enrichment in their lives.

The framework acknowledges that many children and young people will engage with the expressive arts in what were formerly seen as extra-curricular activities, and that the expressive arts can and should play an important part in the life of the school or early years centre. The experiences and outcomes relate to all aspects of participation in the expressive arts.

Expressive arts Experiences and outcomes

Experiences in the expressive arts involve creating and presenting and are practical and experiential. Evaluating and appreciating are used to enhance enjoyment and develop knowledge and understanding.

My learning in, through and about the expressive arts:

- enables me to experience the inspiration and power of the arts
- recognises and nurtures my creative and aesthetic talents
- allows me to develop skills and techniques that are relevant to specific art forms and across the four capacities
- provides opportunities for me to deepen my understanding of culture in the wider world
- is enhanced and enriched through partnerships with professional arts companies, creative adults and cultural organisations.

Participation in performances and presentations

All aspects of learning in expressive arts include opportunities to present and perform, for example through preparation of artwork for display, presentation of a short improvised drama to members of the class or performance of dance or music to parents or in the community. At third level, as a culmination of learning within their broad general education each young person should have the opportunity to contribute to a significant presentation (such as an exhibition) or performance in at least one area of the expressive arts.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I have experienced the energy a being part of an audience for oth			I have used the skills I have developed in the expressive arts to contribute to a public presentation/performance. I have experienced the energy and excitement of being part of an audience for other people's presentations/performances.	I have experienced the energy and excitement of presenting/performing for different audiences.

¹ Participation in this experience should occur in at least one area of the expressive arts. According to the context this will be either a performance or a presentation.

Art and design

Through art and design, learners have rich opportunities to be creative and to experience inspiration and enjoyment. They explore a wide range of two- and three-dimensional media and technologies through practical activities, and create, express, and communicate ideas. Their studies of the works of artists and designers enhance their enjoyment and deepen their knowledge and understanding.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I have the freedom to discover and choose ways to create images and objects using a variety of materials.	I have the opportunity to choose and explore a range of media and technologies to create images and objects, discovering their effects and suitability for specific tasks.	I have the opportunity to choose and explore an extended range of media and technologies to create images and objects, comparing and combining them for specific tasks.	I have experimented with a range of media and technologies to create images and objects, using my understanding of their properties.	I have continued to experiment with a range of media and technologies, handling them with control and assurance to create images and objects. I can apply my understanding of the properties of media and of techniques to specific tasks.
	I can create and present work using the visual elements of line, shape, form, colour, tone, pattern and texture.	I can create and present work that shows developing skill in using the visual elements and concepts.	I can use and combine the visual elements and concepts to convey ideas, thoughts and feelings in expressive and design work.	I can use the visual elements and concepts with sensitivity to express qualities and relationships and convey information, thoughts and feelings. I can use my skills and creativity to generate original ideas in my expressive and design work.
I can create a range of visual information through observing and recording from my experiences across the curriculum.		Through observing and recording from my experiences across the curriculum, I can create images and objects which show my awareness and recognition of detail.	Through observing and recording, I can create material that shows accuracy of representation.	Through creating a range of reference material, I can demonstrate my skills of observing and recording and apply them to work in other areas of the curriculum.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Inspired by a range of stimuli, l feelings through activities withi	can express and communicate n art and design.	my ideas, thoughts and		Having chosen personal themes and developed my own ideas from a range of stimuli, I can express and communicate my ideas, thoughts and feelings through 2D and 3D work.
Working on my own and with others, I use my curiosity and imagination to solve design problems.	I can use exploration and imagination to solve design problems related to real-life situations.	I can develop and communicate my ideas, demonstrating imagination and presenting at least one possible solution to a design problem.	While working through a design process in response to a design brief, I can develop and communicate imaginative design solutions.	By working through a design process in response to a design brief, I can develop and communicate imaginative and original design solutions.
I can respond to the work of ar comment on my own and othe	o ,	g my thoughts and feelings. I ca	n give and accept constructive	I can analyse art and design techniques, processes and concepts, make informed judgements and express considered opinions on my own and others' work.

Dance

Through dance, learners have rich opportunities to be creative and to experience inspiration and enjoyment. Creating and performing will be the core activities for all learners, and taking part in dance contributes to their physical education and physical activity. Learners develop their technical skills and the quality of their movement, and use their imagination and skills to create and choreograph dance sequences. They further develop their knowledge and understanding and their capacity to enjoy dance through evaluating performances and commenting on their work and the work of others.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I have the opportunity and freedom to choose and explore ways that I can move rhythmically, expressively and playfully.	I enjoy creating short dance sequences, using travel, turn, jump, gesture, pause and fall, within safe practice.	I can explore and choose movements to create and present dance, developing my skills and techniques.	I have created and taken part in dance from a range of styles and cultures.	I can apply my performance skills to dance with accuracy, control, body awareness, sensitivity and movement flow. I can communicate my artistic intention and take account of different audience groups. I can apply theatre arts technology to add excitement and drama to performances.
Inspired by a range of stimuli, I work in dance.	can express my ideas, thoughts		I can select ideas from a range of stimuli to choreograph dance motifs in creative ways.	
I have opportunities to enjoy taking part in dance experiences.	I am becoming aware of different features of dance and can practise and perform steps, formations and short dance.	I have taken part in dance from a range of styles and cultures, demonstrating my awareness of the dance features.		I can participate in dance styles and activities which challenge and extend my repertoire of movement and my knowledge of the styles and cultures of dance.

Dance (continued)				
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I can respond to the experienc comment on my own and othe	ce of dance by discussing my thoug ers' work.	hts and feelings. I can give and a	accept constructive	I can analyse technical aspects of dance, make informed judgements and express personal opinions o my own and others' work.

Drama

Through drama, learners have rich opportunities to be creative and to experience inspiration and enjoyment. Creating and presenting are prominent activities for all learners. Their acting and presenting skills are developed through participating in scripted or improvised drama. Exploring real and imaginary situations helps learners to understand and share their world. They develop their capacity to enjoy drama and their knowledge and understanding through evaluating technical aspects and scripts, and commenting on their work and the work of others.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I have the freedom to choose and explore how I can use my voice, movement, and expression in role play and drama.	I enjoy creating, choosing and accepting roles, using movement, expression and voice.	I can create, adapt and sustain different roles, experimenting with movement, expression and voice and using theatre arts technology.	I can create, develop and sustain a realistic or stylised character through the use of voice, movement and language.	I can demonstrate sensitivity, precision and depth in the portrayal of a character, conveying relationships and situations in a variety of settings and to different audiences.
Inspired by a range of stimuli, I feelings through drama.	can express and communicate		In response to a variety of stimuli, I can use my understanding of characterisation to create characters using different approaches, making use of voice, movement and language. I can present my work to an audience.	

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I use drama to explore real and imaginary situations, helping me to understand my world.	I have developed confidence and skills in creating and presenting drama which explores real and imaginary situations, using improvisation and script.	I have created and presented scripted or improvised drama, beginning to take account of audience and atmosphere.	Having developed ideas from a range of stimuli, I can contribute to devising, rehearsing and presenting drama or scripts.	Having had opportunities to lead negotiation and decision making, I can work on my own and with others to devise, rehearse and refine dramas and scripts. I can use theatre arts technology to enhance tension, mood and atmosphere in drama work.
I can respond to the experience comment on my own and other	I can analyse technical aspects of drama and scripts make informed judgments and express considered opinions on my own and others' work.			

Music

Through music, learners have rich opportunities to be creative and to experience inspiration and enjoyment. Performing and creating music will be the prominent activities for all learners. Through these activities they develop their vocal and instrumental skills, explore sounds and musical concepts, and use their imagination and skills to create musical ideas and compositions. They can further develop their understanding and capacity to enjoy music through listening to musical performances and commenting on them. They use ICT to realise or enhance their composition and performance, and to promote their understanding of how music works.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I enjoy singing and playing along to music of different styles and cultures.	I can sing and play music from other styles and cultures, showing growing confidence and skill while learning about musical notation and performance directions.	I can sing and play music from a range of styles and cultures, showing skill and using performance directions, and/or musical notation.	I can sing and/or play music from a range of styles and cultures and perform my chosen music confidently using performance directions, musical notation and/or playing by ear.	I can give assured, expressive and imaginative performances of vocal and/or instrumental music from a wide range of styles and cultures, using performance directions, musical notation, and/or playing by ear.
I have the freedom to use my voice, musical instruments and music technology to discover and enjoy playing with sound and rhythm.	I can use my voice, musical instruments and music technology to discover and enjoy playing with sound, rhythm, pitch and dynamics.	I can use my voice, musical instruments and music technology to experiment with sounds, pitch, melody, rhythm, timbre and dynamics.	I can use my voice, musical instruments or music technology to improvise or compose with melody, rhythm, harmony, timbre and structure.	I can use my chosen vocal and/or instrumental skills to improvise and compose, showing developing style and sophistication. I can use music technology to compose, record and produce music and to enhance performance.
	and working on my own and/or w nts and feelings through musical		Having developed my ideas from a range of stimuli, I can create and present compositions using a broad range of musical concepts and ideas.	

Music (continued)						
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
I can respond to music by describing my thoughts and feelings about my own and others' work.	I have listened to a range of me discussing my thoughts and fee constructive comment on my o	elings. I can give and accept	I have listened to a range of music and can identify features and concepts. I can give constructive comments on my own and others' work, including the work of professionals.	Having reflected on my personal experiences, including participation and engagement with professionals, I can listen to a wide range of music and identify and analyse technical aspects, make informed judgments and express personal opinions on my own and others' work.		

Appendix – Explanations and glossary

The following explanations of specific language are intended to help educators, parents, children and young people interpret the outcomes.

Art and design

Opportunities to study design in the following contexts: graphic, product, fashion/textile, architecture, interior and jewellery should be made available across the five levels, taking balance and previous learning into consideration.

Art and design concepts

For example, space, scale, proportion and perspective.

Art and design technology

For example, computer software, photography, moving image media and screen printing.

Design brief

A written plan that identifies a problem to be solved, its criteria and its constraints. The design brief is used to encourage consideration of all aspects of a problem before attempting a solution.

Design process

A systematic problem-solving strategy, with criteria and constraints, used to develop many possible solutions to solve a problem. The process involves: investigation, development of ideas, production of solution and evaluation of solution.

Expressive

Activities involving the expression of personal ideas, thoughts and feelings in visual terms. This could include drawing, painting, sculpture, printmaking and photography.

Form

External three-dimensional outline, appearance or configuration of something that could be, for example, solid, transparent, rigid, flexible.

Medium/Media

Tool(s) for creating and presenting in art and design, such as chalks, drawing inks, gouache, acrylics, fabric dyes, printing inks, sculpting materials, jewellery metals and materials, and digital media, including photographs and moving image media.

Visual elements

The basic elements (building blocks) in art and design activities – line, shape, form, colour, tone, pattern, texture.

Dance

Choreographic form

Ways of creating dance, for example repeating phrases of movement.

Dance motif

A short pattern of movement that expresses and communicates a mood, a feeling, an activity or an idea.

Dance sequences

Routines which may contain the body actions of travel, turn, jump, gesture, pause and fall within safe practice.

Theatre arts technology

For example lighting and sound equipment used to enhance performances.

Drama

Drama forms

For example a play, comedy or pantomime.

Drama conventions

Alternative ways of presenting parts of a drama, for example mime, voice over, freeze frame.

Theatre arts technology

For example lighting and sound equipment used to enhance performances.

Music

Dynamics

The varying degrees of loudness and quietness in sound.

Music concepts

Terms that describe the ingredients of music, such as repetition, harmony, major key, syncopation.

Music technology

The use of electronic devices and computer software in music compositions and performance.

Pitch

The term used to describe how high or low/deep a note or sound is.

Timbre

The tone colour or quality of tone which distinguishes one instrument from another.

curriculum for excellence: health and wellbeing

Health and wellbeing Principles and practice

Curriculum for Excellence has an important role to play in promoting the health and wellbeing of children and young people and of all of those in the educational communities to which they belong. This paper is intended to support discussion and planning between practitioners in all sectors and services and in local authorities.

Together, these documents describe the expectations upon individuals, schools and local authorities for promoting the health and wellbeing of children and young people.

What are the main purposes of learning in health and wellbeing?

Learning in health and wellbeing ensures that children and young people develop the knowledge and understanding, skills, capabilities and attributes which they need for mental, emotional, social and physical wellbeing now and in the future. Learning through health and wellbeing enables children and young people to:

- make informed decisions in order to improve their mental, emotional, social and physical wellbeing
- experience challenge and enjoyment
- · experience positive aspects of healthy living and activity for themselves
- apply their mental, emotional, social and physical skills to pursue a healthy lifestyle
- make a successful move to the next stage of education or work
- establish a pattern of health and wellbeing which will be sustained into adult life, and which will help to promote the health and wellbeing of the next generation of Scottish children.

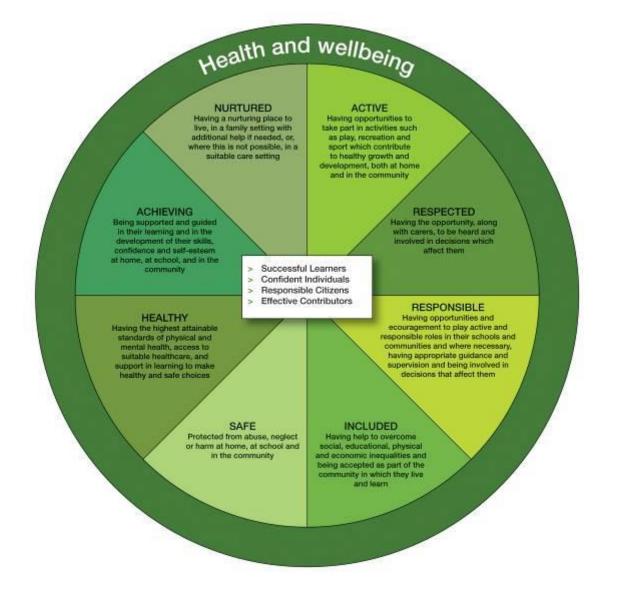
It also enables some to perform at high levels in sport or prepare for careers within the health and leisure industries.

What does the health and wellbeing framework mean for practitioners?

The statements of experiences and outcomes in health and wellbeing reflect a holistic approach to promoting the health and wellbeing of all children and young people. They are consistent with the United Nations Convention on the Rights of the Child, which sets out the right for all children and young people to have access to appropriate health services and to have their health and wellbeing promoted. They build on the considerable work of Health Promoting Schools and the publication of *Being Well, Doing Well* which underlines the importance of a 'health enhancing' school ethos – one characterised by care, respect, participation, responsibility and fairness for all.

Children and young people should feel happy, safe, respected and included in the school environment and all staff should be proactive in promoting positive behaviour in the classroom, playground and the wider school community. Robust policies and practice which ensure the safety and wellbeing of children should already be in place. In addition, there are many ways in which establishments can assist young people. These include peer support, buddies, breakfast or lunch clubs, safe areas, mentors, pupil support staff and extended support teams.

Good health and wellbeing is central to effective learning and preparation for successful independent living. This aspiration for every child and young person can only be met through a concerted approach: schools and their partners working together closely to plan their programmes for health and wellbeing explicitly, taking account of local circumstances and individual needs. Planning to provide and manage the many different and complementary contributions may be challenging but is needed. Each individual practitioner must be aware of his or her roles and responsibilities. The diagram below illustrates this shared vision and common goal.



Learning through health and wellbeing promotes confidence, independent thinking and positive attitudes and dispositions. Because of this, it is the responsibility of every teacher to contribute to learning and development in this area.

Building the Curriculum 1

How is the health and wellbeing framework structured?

The framework begins by describing features of the environment for learning which will support and nurture the health and wellbeing of children and young people, including a positive ethos and relationships, and participation in activities which promote a healthy lifestyle. These statements are intended to help to inform planning and practice within establishments or clusters and also by individual practitioners.

The statements of experiences and outcomes are then structured into the following organisers:

- Mental, emotional, social and physical wellbeing
- Planning for choices and changes
- Physical education, physical activity and sport
- Food and health
- Substance misuse
- Relationships, sexual health and parenthood.

The aspects of the health and wellbeing framework which are the responsibility of all adults who are working together to support the learning and development of children and young people are identified through the use of italics.

Many of the experiences and outcomes span two or more levels; some are written to span from early to Standard 4 because they are applicable throughout life. All of these should be revisited regularly in ways which take account of the stage of development and understanding of each child and young person and are relevant and realistic for them.

What are practitioners' roles and responsibilities across health and wellbeing?

Some contributions are the responsibility of all, while other contributions relate to specific stages or are more specialised.

Health and wellbeing across learning: the responsibilities of all practitioners

Everyone within each learning community, whatever their contact with children and young people may be, shares the responsibility for creating a positive ethos and climate of respect and trust – one in which everyone can make a positive contribution to the wellbeing of each individual within the school and the wider community. There are many ways in which establishments can assist young people. These include peer support, buddies, breakfast or lunch clubs, safe areas, mentors, pupil support staff and extended support teams.

The responsibilities include individuals' contributions to the features set out in the introductory statements, and experiences and outcomes in mental, emotional, social and physical wellbeing, planning for choices and changes, and relationships. They include each practitioner's role in establishing open, positive, supportive relationships across the school community, where children and young people will feel that they are listened to, and where they feel secure in their ability to discuss sensitive aspects of their lives; in promoting a climate in which children and young people feel safe and secure; in modelling behaviour which promotes health and wellbeing, and encouraging it in others through using learning and teaching methodologies which promote effective learning, and by being sensitive and responsive to the wellbeing of each child and young person. Practical responsibilities include understanding of anti-discriminatory, anti-bullying and child protection policies by all staff and knowledge of the steps to be taken in any given situation, including appropriate referral.

Focused programmes

Children will experience certain aspects of health and wellbeing through focused programmes such as personal and social education programmes. Within these programmes, schools will often draw on the expertise of others. For example, when substance misuse is being considered, specialists within and outwith the learning community working together are able to ensure that children and young people learn in the most effective ways. Subject teachers, including teachers of home economics and physical education, play a very important role in the teaching and learning of health and wellbeing through the experiences and outcomes for food and health, and physical education, physical activity and sport. Sports specialists play an important part in physical activity and sport provision.

Partnership working across sectors and services

Children's and young people's learning in health and wellbeing benefits strongly from partnership working between teachers and colleagues such as home link staff, health professionals, educational psychologists and sports coaches who can make complementary contributions through their specialist expertise and knowledge.

Personal support for children and young people

The health and wellbeing of every child and young person is greatly enhanced through the individual support and pastoral care which they receive through having an identified member of staff who knows and understands them and can support them in facing changes and challenges and in making choices. Members of staff are often best placed to identify even minor changes of mood in a child or young person which could reflect an important emotional, social or mental health issue with which that child or young person needs help or support. It is important that children and young people feel that they can share their anxieties with an appropriate individual who has the skills, rapport, responsibility and the time to listen and to help, or can identify appropriate sources of support.

What factors need to be taken into account in planning for health and wellbeing?

Children's capacities to learn are shaped by their background and home circumstances as well as by their individual development. Exposure to different social and environmental influences contributes to the way that attitudes, values and behaviours are formed. These in turn affect their ability to make and take decisions.

Progression and development in many aspects of health and wellbeing will depend upon the stage of growth, development and maturity of the individual, upon social issues and upon the community context. Teachers and other practitioners in planning together will take account of these factors, ensuring that experiences are relevant and realistic for the child or young person in his or her circumstances. Particularly within experiences and outcomes which span more than one level, careful planning will be required to ensure appropriate pace and coverage, and teachers and other practitioners will need to decide when and how the experiences and outcomes are introduced. The planning arrangements within which local authorities, schools and teachers work must ensure that these decisions are taken in the best interests of each child and young person and take account of his or her social and personal circumstances as necessary.

The knowledge, skills and attitudes identified within the various aspects of the health and wellbeing experiences and outcomes are interrelated; teachers and other practitioners will plan and present learning in ways that enable learners to see them as closely linked.

The experiences and outcomes support learning which is challenging and enjoyable; they provide the necessary breadth and depth to meet the needs of all learners; they ensure that account is taken of individual and/or community contexts. The experiences and outcomes thus offer flexibility to allow school staff and partner agencies to plan health and wellbeing programmes which take account of local needs and are innovative, use relevant learning contexts and ensure coherence and progression. It is important that all aspects of health and wellbeing, including events, are planned as part of a whole school strategy, to ensure that they have sustained impact.

What features are required to effectively promote health and wellbeing?

Effective learning through health and wellbeing which promotes confidence, independent thinking and positive attitudes and actions requires:

Leadership which:

- establishes a shared vision of health and wellbeing for all
- is open, collaborative and responsive
- engages and works with parents and carers and all stakeholders to provide children and young people with coherent and positive experiences which promote and protect their health
- promotes the health of all within the school community and develops arrangements to support their mental, social, emotional and physical wellbeing
- responds sensitively and appropriately if a critical incident takes place within the school community, and has contingency plans in place to enable this to happen.

Partnership working which:

- engages the active support of parents and carers
- reinforces work across transitions and cluster planning across sectors
- maximises the contributions of the wider community

- draws upon specialist expertise
- ensures, through careful planning and briefing, that all contributions come together in ways which ensure coherence and progression.

Learning and teaching which:

- engages children and young people and takes account of their views and experiences, particularly where decisions are to be made that may impact on life choices
- takes account of research and successful practice in supporting the learning and development of children and young people, particularly in sensitive areas such as substance misuse
- uses a variety of approaches including active, cooperative and peer learning and effective use of technology
- encourages and capitalises on the potential to experience learning and new challenges in the outdoor environment
- encourages children and young people to act as positive role models for others within the educational community
- leads to a lasting commitment in children and young people to follow a healthy lifestyle by participation in experiences which are varied, relevant, realistic and enjoyable
- helps to foster health in families and communities through work with a range of professions, parents and carers, and children and young people, and enables them to understand the responsibilities of citizenship
- harnesses the experience and expertise of different professions, including developing enterprise and employability skills.

What are broad features of assessment in health and wellbeing?

As important aspects of health and wellbeing are the responsibility of all staff in educational establishments in partnership with others, and because of the importance of health and wellbeing to learning and development, everyone should be clear about their areas of responsibility and their roles in assessment. In health and wellbeing, assessment has to take account of the breadth and purpose of the wide range of learning experienced by children and young people within this curriculum area. It will focus on children and young people's knowledge and understanding, skills and attributes in relation to physical education, food and health, substance misuse, relationships, sexual health and parenthood, and their social and life skills.

Teachers and learners can gather evidence of progress as part of day-to-day learning inside and outside the classroom and, as appropriate, through specific assessment tasks. From the early years through to the senior stages, children and young people's progress will be seen in how well they are developing and applying their knowledge, understanding and skills in, for example, key features of healthy living and relationships, and in approaches to personal planning, assessing risk and decision making. For example:

- To what extent do they understand the role of healthy eating and physical fitness in contributing to their wellbeing?
- How well are they applying personal and interpersonal skills as part of their daily lives, and developing them as they grow and mature?
- Through their involvement in planning, managing and participating in individual and group activities in school and in the community, do they demonstrate skills, attitudes and attributes which will be important for the world of work, such as judgement, resilience and independence?

Progression in knowledge, understanding and skills can be seen as children and young people demonstrate that they are:

- applying their knowledge and skills with increasing confidence and competence in dealing with familiar circumstances and new challenges
- developing an increasing depth of understanding of their own and others' motivations, attitudes, beliefs and behaviours
- extending the range of their relationships within and outwith the school.

Assessment should also link with other areas of the curriculum, within and beyond the classroom, offering children and young people opportunities to apply their knowledge and skills in more complex, demanding or unfamiliar learning or social contexts.

How is personal safety addressed in the framework?

Each organiser includes statements of experiences and outcomes relating to relevant aspects of personal safety: for example travelling safely, responses in emergencies, food safety, substance misuse and safety in relationships.

What is the contribution of physical education, physical activity and sport to health and wellbeing?

Regular physical activity is essential for good health. Physical education should inspire and challenge children and young people to experience the joy of movement, to develop positive attitudes both individually and as part of a group and to enhance their quality of life through active living. This will give children and young people an important foundation for participation in experiences in physical activities and sport and in preparation for a healthy and fulfilling lifestyle. Children and young people will participate in and enjoy physical activity and sport, in addition to planned physical education sessions, at break times and lunchtimes, during travel and beyond the school day. Outdoor learning can contribute to physical activity and enhance learning in different areas of the curriculum.

Taken together, the experiences and outcomes in physical education, physical activity and sport aim to establish the pattern of daily physical activity which, research has shown, is most likely to lead to sustained physical activity in adult life.

How can a whole school approach to food and health contribute to health and wellbeing?

Schools contribute to improving children's diets through the promotion of consistent healthy eating messages enabling them to make healthy food choices and to develop lifelong healthy eating habits. A good diet is essential for good health. Research shows that many children fall short of national dietary recommendations. A poorly balanced diet can contribute to the risk of developing a number of diseases and conditions including tooth decay, obesity, certain cancers, diabetes, coronary heart disease and stroke.

Practical food activities feature across the food and health experiences and outcomes so that children and young people will enjoy a variety of opportunities to apply their knowledge and skills to plan and safely prepare dishes for a healthy balanced diet to meet their own needs and the needs of others. In this way they will gain an appreciation that preparing and eating food can be a pleasant, enjoyable and social experience.

How can I make connections within and beyond health and wellbeing?

The health and wellbeing experiences and outcomes are designed to encourage links with all other areas of the curriculum, to reinforce learning and to provide relevant, enjoyable and active experiences.

- The health and wellbeing experiences and outcomes provide valuable opportunities to develop skills in literacy and numeracy.
- There are important links between health and wellbeing, and religious and moral education and religious education in Roman Catholic schools in the establishment of values and growth of spiritual wellbeing, and in considering relationships.
- Participation in expressive arts activities can make an important contribution to a child's or young person's sense of wellbeing and can bring learning to life. Using the expressive arts as a medium for

learning, for example through role play, can engage learners in issues such as bullying, in more engaging and accessible ways.

- There are very close connections between dance and physical education, in particular through the shared outcomes in evaluating and appreciating.
- There are clear connections between science and several aspects of health and wellbeing; between the technologies and, for example, food and health; and between the social studies and the aspects relating to citizenship and participation.

In all of these cases staff have the scope to group experiences and outcomes together in different and imaginative ways which enrich, consolidate and enhance progression in learning.

Health and wellbeing¹ Experiences and outcomes

Learning in health and wellbeing ensures that children and young people develop the knowledge and understanding, skills, capabilities and attributes which they need for mental, emotional, social and physical wellbeing now and in the future.

Each establishment, working with partners, should take a holistic approach to promoting health and wellbeing, one that takes account of the stage of growth, development and maturity of each individual, and the social and community context.

I can expect my learning environment to support me to:

- develop my self-awareness, self-worth and respect for others
- meet challenges, manage change and build relationships
- experience personal achievement and build my resilience and confidence
- understand and develop my physical, mental and spiritual wellbeing and social skills
- understand how what I eat, how active I am and how decisions I make about my behaviour and relationships affect my physical and mental wellbeing
- participate in a wide range of activities which promote a healthy lifestyle
- understand that adults in my school community have a responsibility to look after me, listen to my concerns and involve others where necessary
- learn about where to find help and resources to inform choices
- assess and manage risk and understand the impact of risk-taking behaviour
- reflect on my strengths and skills to help me make informed choices when planning my next steps
- acknowledge diversity and understand that it is everyone's responsibility to challenge discrimination.

¹Health and wellbeing experiences and outcomes which are the responsibility of all adults working together are shown in italics.

Because of the nature of development and learning in health and wellbeing, many of the experiences and outcomes are written to span two or more levels. They should be regularly revisited through a wide range of relevant and realistic learning experiences to ensure that every child and young person is progressing in his or her development and learning.

Mental, emotional, social and physical wellbeing

Mental, emotional, social and physical wellbeing are essential for successful learning.

The mental, emotional, social and physical wellbeing of everyone within a learning community should be positively developed by fostering a safe, caring, supportive, purposeful environment that enables the development of relationships based on mutual respect. The four aspects of wellbeing are inextricably linked and are only separated here for practical purposes.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Mental and emotional	I am aware of and able to express my feelings and am developing the ability to talk about them.						
wellbeing	I know that we all experience a variety of thoughts and emotions that affect how we feel and behave and I am learning ways of managing them.						
	I understand that there are people I can talk to and that there are a number of ways in which I can gain access to practical ar support to help me and others in a range of circumstances.						
	l understand that my fee my own behaviour and t		ange depending upon what is h	happening within and around me. T	This helps me to understand		
	I know that friendship, caring, sharing, fairness, equality and love are important in building positive relationships. As I develop and value relationships, I care and show respect for myself and others.						
				l strengthened through personal co I that if this happens there is supp			
	I am learning skills and strategies which will support me in challenging times, particularly in relation to change and loss.						
	l understand that people	e can feel alone and can be	e misunderstood and left out by	others. I am learning how to give a	appropriate support.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Social wellbeing	As I explore the rights to which I and others are entitled, I am able to exercise these rights appropriately and accept the responsibilities that go with them. I show respect for the rights of others.						
	I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.						
	I make full use of and value the opportunities I am given to improve and manage my learning and, in turn, I can help to encourage learning and confidence in others.						
	Representing my class, school and/or wider community encourages my self-worth and confidence and allows me to contribute to and participate in society.						
	Through contributing my views, time and talents, I play a part in bringing about positive change in my school and wider community.						
	I value the opportunities I am given to make friends and be part of a group in a range of situations.						

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Physical wellbeing	l am developing my u	I am developing my understanding of the human body and can use this knowledge to maintain and improve my wellbeing and health.						
	I am learning to asses	I am learning to assess and manage risk, to protect myself and others, and to reduce the potential for harm when possible.						
	l know and can demo	I know and can demonstrate how to keep myself and others safe and how to respond in a range of emergency situations.						
	I know and can demo	I know and can demonstrate how to travel safely.						

Planning for choices and changes

Learners need to experience opportunities which are designed not only to raise their awareness of future choices but also raise their expectations and aspirations. They develop the skills for personal planning and making decisions in the context of curriculum, learning and achievement which will prepare them for next stages in life.

Learners should experience activities which enable them to develop the skills and attributes they will need if they are to achieve and sustain positive destinations beyond school. Demands and employment patterns are changing, so it is particularly important for all young people to develop high levels of skill and also an understanding of the world of work, training and lifelong learning so that they can embrace opportunities.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
In everyday activity and play, I explore and make choices to develop my learning and interests. I am encouraged to use and share my experiences.	Through taking part in a variety of events and activities, I am learning to recognise my own skills and abilities as well as those of others.	Opportunities to carry out different activities and roles in a variety of settings have enabled me to identify my achievements, skills and areas for development. This will help me to prepare for the next stage in my life and learning.	I am developing the skills and attributes which I will need for learning, life and work. I am gaining understanding of the relevance of my current learning to future opportunities. This is helping me to make informed choices about my life and learning.	Based on my interests, skills, strengths and preferences, I am supported to make suitable, realistic and informed choices, set manageable goals and plan for my further transitions.
I can describe some of the kinds of work that people do and I am finding out about the wider world of work.		I am investigating different careers/occupations, ways of working, and learning and training paths. I am gaining experience that helps me recognise the relevance of my learning, skills and interests to my future life.		

Physical education, physical activity and sport

Physical education

Physical education provides learners with a platform from which they can build physical competences, improve aspects of fitness, and develop personal and interpersonal skills and attributes. It enables learners to develop the concepts and skills necessary for participation in a wide range of physical activity, sport, dance and outdoor learning, and enhances their physical wellbeing in preparation for leading a fulfilling, active and healthy lifestyle.

They encounter a variety of practical learning experiences, including working on their own, with a partner and in small and large groups, and using small and large equipment and apparatus, both outdoors and indoors.

Learning in, through and about physical education is enhanced by participating on a regular basis in a wide range of purposeful, challenging, progressive and enjoyable physical activities with choice built in for all learners. The Scottish Government expects schools to continue to work towards the provision of at least two hours of good quality physical education for every child, every week.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Movement skills, competencies and concepts	I am learning to move my body well, exploring how to manage and control it and finding out how to use and share space.	I am discovering ways that I can link actions and skills to create movement patterns and sequences. This has motivated me to practise and improve my skills to develop control and flow.	As I encounter new challenges and contexts for learning, I am encouraged and supported to demonstrate my ability to select, adapt and apply movement skills and strategies, creatively, accurately and with control.		As I encounter a variety of challenges and contexts for learning, I am encouraged and supported to demonstrate my ability to select and apply a wide range of complex movement skills and strategies, creatively, accurately and with consistency and control.
	I am developing my movement skills through practice and energetic play.	I am developing skills and techniques and improving my level of performance and fitness.	I practise, consolidate and refir performance. I am developing fitness.		I can organise my time to practise, consolidate and refine my skills to achieve my highest quality performance in a range of contexts. I am developing and sustaining my level of performance across all aspects of fitness.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Cooperation and competition	I am aware of my own and others' needs and feelings especially when taking turns and sharing resources. I recognise the need to follow rules.	I can follow and understand rules and procedures, developing my ability to achieve personal goals. I recognise and can adopt different roles in a range of practical activities.	While working and learning with others, I improve my range of skills, demonstrate tactics and achieve identified goals.	I am developing the skills to lead and recognise strengths of group members, including myself. I contribute to groups and teams through my knowledge of individual strengths, group tactics, and strategies.	 While learning together, and in leadership situations, I can: experience different roles and take responsibility in organising a physical event contribute to a supportive and inclusive environment demonstrate behaviour that contributes to fair play.
Evaluating and appreciating	By exploring and observing movement, I can describe what I have learned about it.	I can recognise progress and achievement by discussing my thoughts and feelings and giving and accepting feedback.	By reflecting on my own and others' work and evaluating it against shared criteria, I can recognise improvement and achievement and use this to progress further.	I can analyse and discuss elements of my own and others' work, recognising strengths and identifying areas where improvements can be made.	 I can: observe closely, reflect, describe and analyse key aspects of my own and others' performances make informed judgements, specific to ar activity monitor and take responsibility for improvin my own performance based on recognition of personal strengths and development needs.

Physical education, physical activity and sport (continued)

Physical activity and sport

In addition to planned physical education sessions, physical activity and sport take place in the classroom, in the school, during travel such as walking and cycling, in the outdoor environment and in the community. Learning in, through and about physical activity and sport is enhanced by participating in a wide range of purposeful and enjoyable physical pursuits at break times, lunchtimes, within and beyond the place of learning.

The experiences and outcomes are intended to establish a pattern of daily physical activity which, research has shown, is most likely to lead to sustained physical activity in adult life. Experiences and outcomes should also open up opportunities for learners to participate and perform at their highest level in sport and, if interested, pursue careers in the health and leisure industries.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
opp par kind bot	rticipate in different nds of energetic play, th outdoors and doors.	Within and beyond my place of learning I am enjoying daily opportunities to participate in physical activities and sport, making use of available indoor and outdoor space.	I am experiencing enjoyment and basis by taking part in different ki activities of my choosing, includir outdoor learning, available at my wider community.	inds of energetic physical ng sport and opportunities for	 I continue to enjoy daily participation in moderate to vigorous physical activity and sport and can demonstrate my understanding that it can: contribute to and promote my learning develop my fitness and physical and mental wellbeing develop my social skills, positive attitudes and values make an important contribution to living a healthy lifestyle.

Physical activity and sport (continued)									
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4				
			I have investigated the role of spo may offer me. I am able to access participation in sport and the deve in my place of learning and beyon	s opportunities for elopment of my performance	I can explain the role of spo in cultural heritage and have explored the opportunities available for me to participat in school sport and sporting events. I make use of participation and performance pathways that allow me to continue and extend my sporting experience in my place of learning and beyond.				

Physical education, physical activity and sport (continued)

Physical activity and health

Learners develop an understanding of their physical health and the contribution made by participation in physical education, physical activity and sport to keeping them healthy and preparing them for life beyond school. They investigate the relationship between diet and physical activity and their role in the prevention of obesity.

The experiences and outcomes are intended to establish a pattern of daily physical activity which, research has shown, is most likely to lead to sustained physical activity in adult life. Physical activity and sport take place in addition to planned physical education sessions, at break times and lunchtimes in and beyond the place of learning.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I know that being active is a healthy way to be.	I am aware of the role physical activity plays in keeping me healthy and know that I also need to sleep and rest, to look after my body.	I can explain why I need to be a maintain good health and try to sleep, rest and physical activity	achieve a good balance of	
I can describe how I feel after taking part in energetic activities and I am becoming aware of some of the changes that take place in my body.	I understand that my body needs energy to function and that this comes from the food I eat. I am exploring how physical activity contributes to my health and wellbeing.	I can explain the links between physically active, the food I eat		I have investigated factors which can influence participation in physical activity and food choices, and the impact of activity on population health in the Scottish and wider contexts. I can use this information to discuss policies and inform my own health choices.

Food and health

Learners develop their understanding of a healthy diet, which is one composed of a variety and balance of foods and drinks. They acquire knowledge and skills to make healthy food choices and help to establish lifelong healthy eating habits. They develop an appreciation that eating can be an enjoyable activity and understand the role of food within social and cultural contexts. They explore how the dietary needs of individuals and groups vary through life stages, for example during pregnancy and puberty, and the role of breastfeeding during infancy.

Learners develop knowledge and understanding of safe and hygienic practices and their importance to health and wellbeing and apply these in practical activities and everyday routines including good oral health. They develop awareness that food practices and choices depend on many factors including availability, sustainability, season, cost, religious beliefs, culture, peer pressure, advertising and the media.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4				
Nutrition	I enjoy eating a diversit	I enjoy eating a diversity of foods in a range of social situations.							
	Together we enjoy handling, tasting, talking and learning about different foods, discovering ways in which eating and drinking may help us to grow and keep healthy.	By investigating the range of foods available I can discuss how they contribute to a healthy diet. I experience a sense of enjoyment and achievement when preparing simple healthy foods and drinks.	By applying my knowledge and understanding of current healthy eating advice I can contribute to a healthy eating plan.	By taking part in practical food activities and taking account of current healthy eating advice, I can prepare healthy foods to meet identified needs.	Having researched food and health policy, and dietary legislation, I can explain how this impacts on individuals, the community and the world of work.				

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Nutrition (continued)				Through practical activities using different foods and drinks, I can identify key nutrients, their sources and functions, and demonstrate the links between energy, nutrients and health.	I can apply my knowledge and understanding of nutrition, current healthy eating advice and the needs of different groups in the community when planning, choosing, cooking and evaluating dishes.
	I know that people need different kinds of food to keep them healthy.	I am beginning to understand that nutritional needs change at different stages of life, for example the role of breastfeeding in infant nutrition.	I understand that people at different life stages have differing nutritional needs and that some people may eat or avoid certain foods.	I am developing my understanding of the nutritional needs of people who have different conditions and requirements.	Having identified diet-related conditions, I can adapt and cook recipes to suit individua needs. Having assessed how lifestyle or life stages can impact on people's nutritiona needs, I can explain how these needs are met.
Safe and hygienic practices	I am becoming aware of how cleanliness, hygiene and safety can affect health and wellbeing and I apply this knowledge in my everyday routines such as taking care of my teeth.		Having learned about cleanliness, hygiene and safety, I can apply these principles to my everyday routines, understanding their importance to health and wellbeing.	I can apply food safety principles when buying, storing, preparing, cooking and consuming food.	Having explored the conditions for bacterial growth, I can use this knowledge to inform my practice and control food safety risks.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Food and the consumer			Through exploration and discussion, I can understand that food practices and preferences are influenced by factors such as food sources, finance, culture and religion.	Having explored a range of iss choice, I can discuss how this individual's health.	
	I explore and discover where foods come from as I choose, prepare and taste different foods.	When preparing and cooking a variety of foods, I am becoming aware of the journeys which foods make from source to consumer, their seasonality, their local availability and their sustainability.			Having investigated the effects of food processing on the nutritional value of foods, I can critically assess the place of processed foods in a healthy balanced diet.
		By investigating food labelling systems, I can begin to understand how to use them to make healthy food choices.		Using my knowledge of nutrition and current healthy eating advice, I can evaluate the information on food packaging, enabling me to make informed choices when preparing and cooking healthy dishes.	I have examined and evaluated food packaging and can understand the legal requirements for manufacturers.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Food and the consumer (continued)		I am discovering the different ways that advertising and the media can affect my choices.	I can understand how advertising and the media are used to influence consumers.		By investigating different influences on the consumer, can discuss how consumers can be influenced by externa sources. I can explain basic legal rights and responsibilities of the consumer, recognising the agencies that can help.

Substance misuse

Learners develop their understanding of the use and misuse of a variety of substances including over the counter and prescribed medicines, alcohol, drugs, tobacco and solvents. They explore and develop their understanding of the impact of risk-taking behaviour on their life choices. The experiences and outcomes will enable learners to make informed personal choices with the aim of promoting healthy lifestyles.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I understand there are things I should not touch or eat and how to keep myself safe, and I am learning what is meant by medicines and harmful substances.	I know that there are medicines and some other substances that can be used in a safe way to improve health and I am becoming aware of how choices I make can affect my health and wellbeing.	I understand the effect that a range of substances including tobacco and alcohol can have on the body.	I understand the positive effects that some substances can have on the mind and body but I am also aware of the negative and serious physical, mental, emotional, social an legal consequences of the misuse of substances.	
		well as my own attitudes and	he media and peer groups as I values can influence how I feel cognise the impact this may have	Through investigation, I can explain how images of substance use and misuse can influence people's behaviour.
		I know that alcohol and drugs can affect people's ability to make decisions.	I am developing a range of skills which can support decision making about substance use. I can demonstrate strategies for making informed choices to maintain and improve my health ar wellbeing and can apply these in situations that may be stressf or challenging, or involve peer pressure.	
			I know how to access information related issues.	and support for substance-

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
		I can identify the different kinds of risks associated with the use and misuse of a range of substances.	can identify safe and unsafe be	and drugs can affect behaviour
I can show ways of getting help in unsafe situations and emergencies.	I know how to react in unsafe situations and emergencies.	I know of actions I can take to help someone in an emergency.	I know the action I should take in the management of incidents and emergencies related to substance misuse. I understand the impact that ongoing misuse of substances ca have on a person's health, future life choices and options.	
		I understand the impact that misuse of substances can have on individuals, their families and friends.		
			Through investigating substance misuse in my local community I can reflect on specific issues, and discuss how they are being addressed.	By researching the impact of substance misuse nationally and internationally I can explain similarities and differences among communities.
				I understand the local, national and international impact of substance misuse.

Relationships, sexual health and parenthood

Learners develop an understanding of how to maintain positive relationships with a variety of people and are aware of how thoughts, feelings, attitudes, values and beliefs can influence decisions about relationships, and sexual health. They develop their understanding of the complex roles and responsibilities of being a parent or carer.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
that likes, dislikes, special qualities and needs can influence relationships.		I understand that a wide range of different kinds of friendships and relationships exist.	I understand the importance of being cared for and caring for others in relationships, and can explain why.	
			I understand and can demonstr required to sustain different type	
I understand positive things about friendships and relationships but when something worries or		I am aware that positive friendships		
upsets me I know who I		can promote health and the health and wellbeing of others.	I understand and can explain th commitment, trust and respect i I understand the different conte- including marriage.	n loving and sexual relationships.
I know that there are per care for and look after u people may be cared for other adults.	s and I am aware that	I am identifying and practising skills to manage changing relationships and I understand the positive impact this can have on my emotional wellbeing.	I recognise that power can exist used positively as well as negat	within relationships and can be ively.
I am aware of the need communication.	to respect personal space	and boundaries and can recogn	ise and respond appropriately to	verbal and non-verbal

Relationships,	Relationships, sexual health and parenthood (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
				I reflect on how my attitudes, beliefs, influence my decisions about friends sexual behaviour.				
				I know that popular culture, the media and peer pressure influence how I feel about myself and the impact this may have on my actions. I am developing skills for making decisions about my relationships and sexual behaviour. I am able to apply the to situations that may be challenging or difficult.				
		I recognise that we have similarities and differences but are all unique.		I understand my own body's uniquer sexuality, and that of others.	ness, my developing			
	I am aware of my growi learning the correct nan and how they work.	ng body and I am nes for its different parts	how I may behave.	d Using what I have learned I am able to make inform decisions and choices that promote and protect my others' sexual health and wellbeing.				
	I am learning what I car and who can help me.	n do to look after my body	I can describe the physical and emotional changes during puberty, understand why they are taking place and the importance of personal hygiene.	I know how to access services, inform sexual health and wellbeing is at risk in relation to sexual health including confidentiality, and my responsibilitie the law.	. I am aware of my rights my right to			

coc	1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
what behavio	should talk to if I am worried about this.		I know that all forms of abuse are wrong and I am developing the skills to keep myself safe and get help if I need it.	I know how to manage situatio health and wellbeing and am le appropriate sexual behaviour. I know where to get support an abuse and I understand that th from different kinds of abuse.	earning to understand what is ad help with situations involving
		e living things come grow, develop and are	I am able to describe how human life begins and how a baby is born.		
	I am able to show an awareness of the tasks required to look after a baby.		I can describe the role of a parent/carer and the skills, commitment and qualities the role requires.	I can explain the importance an responsibility of being a parent choices and options.	
				I can explain the support and care necessary to ensure a child is nurtured through the different stages of childhood.	Through investigation I can explain the support available for parents and carers looking after babies and bringing up children.

Appendix – Explanations

These provide definitions of terms or advice on particular experiences and outcomes.

Introductory statements

Resilience

The development of resilience or coping skills is particularly important to young people as increasing numbers are struggling through school and life with social and emotional needs that greatly challenge schools and welfare agencies.

A resilient child can resist adversity, cope with uncertainty and recover more successfully from traumatic events or episodes.

Mental, emotional, social and physical wellbeing

Mental wellbeing

Mental wellbeing refers to the health of the mind, the way we think, perceive, reflect on and make sense of the world.

Mental health

The World Health Organisation describes mental health as:

'a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.'

Emotional wellbeing

Emotional wellbeing refers to recognising, understanding and effectively managing our feelings and emotions.

Social wellbeing

Social wellbeing refers to being and feeling secure in relationships with family, friends and community, having a sense of belonging and recognising and understanding our contribution in society.

Social wellbeing – HWB 0-12a, etc

This will be developed by raising the young person's awareness, understanding and experience of participation in consultation, citizenship and volunteering activities within the formal and informal curriculum.

Self-esteem/Self-worth

Self-esteem is a self rating of how well the self is doing. It means:

- the way we feel about ourselves
- the way we feel about our abilities
- the value we place on ourselves as human beings.

Physical wellbeing

Physical wellbeing refers to the knowledge, skills and attitudes that we need to understand how physical factors affect our health.

Physical wellbeing – HWB 0-18a, etc

This applies to all kinds of travel – whether on foot, bicycle, motor vehicle or public transport. To support the reduction of road accidents, it is the responsibility of all adults to teach and encourage good road safety practice and to reinforce this by modelling appropriate behaviour.

Particular attention should be paid at times of transition, especially during the transition from primary to secondary school, where there is a significant increase in road traffic accidents.

Emotional literacy

Being 'emotionally literate' means having the ability to identify, understand and express emotions in a healthy way.

Physical education, physical activity and sport

Physical education

Movement skills, competences and concepts

There are two progressive pathways within this line of development. The first concentrates on using your body to perform and link increasingly complex actions and is about developing physical competences in learners which allow them to participate in physical activities. This forms part of the social inclusion agenda.

The second concentrates on the development of high quality performance in a range of contexts, and improving fitness.

Physical experiences and contexts for learning within these lines of development include: gymnastics, dance, water-based activity, directly/indirectly competitive activities and individual/team activities.

Cooperation and competition

The term physical event is deliberately wide as it allows practitioners to utilise a variety of opportunities to deliver the outcome, including, school and local authority competitions, come and try sessions, participation days, festivals and other organised activities.

Physical activity and sport

This line of development addresses the role that schools play in widening activity participation and performance pathways in Scottish sport. Its placement encourages participation and performance at the age most suited to the individual. This should help establish a behaviour pattern in sport which evidence has shown is a strong predictor of participation into adult life.

Moderate activity is that of sufficient intensity to raise the heart and respiration rate. It is characterised by being slightly out of breath and having a raised body temperature.

Vigorous activity is of an intensity to significantly raise the heart and respiration rate. It is characterised by being breathless and perspiring.

Relationships, sexual health and parenthood

HWB 0-47b / HWB 1-47b

While it is important to acknowledge that people use different words for parts of the body associated with sexuality and sexual reproduction, it is essential to introduce and use the proper anatomical terms as early as possible, taking account of cultural and faith perspectives. This provides an appropriate language for learning about relationships and sexual health in establishments and is helpful to professionals and others with a health, care and welfare role.

curriculum for excellence: languages

Classical languages Literacy and English Modern languages

curriculum for excellence: classical languages

Classical languages Principles and practice

What is the value to young people of learning a classical language?

Our ability to use language is central to our thinking and learning. This understanding lies at the heart of the classical languages experiences and outcomes. *Curriculum for Excellence* offers opportunities to develop awareness of the special, vibrant and valuable aspects of classical culture and heritage. As they learn a classical language young people will:

- develop a secure understanding of how language works and develop their capacity to communicate ideas and information in English and other languages
- exercise their intellectual curiosity by questioning, developing their understanding, thinking creatively and critically to synthesise ideas and arguments
- enhance their enjoyment and their understanding of their own and other cultures through literature and other texts.

Building the Curriculum 1

The experiences and outcomes in classical languages individually and together provide opportunities for the development of interesting and relevant coursework. One of the main themes promoted through the study of classical languages is that of culture and heritage. By studying a classical language, young people will become ever more aware of how vital parts of Scotland's culture, the arts, law, political systems and social values are both directly and indirectly linked with the classical world.

The statements of experiences and outcomes in classical languages can support lifelong learning for students of all ages; learning about the cultures of our world or about the social and political dimensions of our society will be enhanced by an awareness of the contributions made by Roman or classical Greek civilisations.

How is the classical languages framework structured?

The framework of experiences and outcomes for classical languages provides guidance for teachers on the levels of achievement expected of learners at different stages. The outcomes embody an appropriate level of proficiency at each level but do not place a ceiling on achievement. Similarly the breadth of the range of experiences allows for different rates of progression.

The outcomes in classical languages are organised into:

- translating texts
- interpretation of texts
- using knowledge about language
- culture and heritage.

Programmes in classical languages will provide broad-based learning experiences combining linguistic, cultural and heritage awareness. By integrating the experiences and outcomes from these different themes, teachers will enable young people to make connections across their learning through taking part in meaningful experiences within relevant contexts as well as across the wider curriculum. The level of achievement at the fourth level has been designed to approximate to that associated with SCQF level 4.

What does this framework mean for learning and teaching in the classical languages?

Teachers will use the flexibility afforded by the framework of the experiences and outcomes for classical languages to design and plan motivating teaching and learning experiences. These will enable young people to develop their awareness of how classical languages provide experiences and develop skills which contribute to the development of the four capacities of *Curriculum for Excellence*.

Young people learning classical languages within a rich and supportive environment will enjoy a skilfully planned mix of teaching approaches including:

- both collaborative and independent working
- effective direct interactive teaching
- the use of contexts which build upon young people's own experiences
- the principles of Assessment is for Learning
- the effective use of research tools and information and communications technology.

When will young people begin to learn a classical language? What does this mean for progression?

Classical languages experiences and outcomes are offered at third and fourth levels. Although young people do not commonly begin to study a classical language before S1, some are introduced to Latin or classical Greek earlier, either through study of a discrete language or as part of a language awareness course.

A well-planned early start to classical language learning will be a positive, stimulating experience which motivates children and young people through exciting contexts and meaningful, accessible content. Activities will harness the curiosity of children for patterns, codes and mythology and will include playing games, exploring different alphabetic systems, carrying out simple instructions, and listening to or reading in translation stories from the classical world. Schools which offer this earlier start will then move children and young people towards the experiences and outcomes described at third level. This will provide them with stimulating opportunities for early achievement of some or all of the outcomes and for depth and breadth of learning.

What are broad features of assessment in classical languages?

Assessment in classical languages will focus on children and young people's knowledge and understanding of the language they select for study and of its culture and heritage, on their skills in analysing, translating and interpreting literary texts, and on their abilities in using and applying what they have learned in different contexts.

Teachers will gather evidence of children and young people's progress as part of day-to-day learning during individual and collaborative activities. The use of specific assessment tasks will also be helpful in assessing progress. Children and young people will demonstrate progress in a number of ways, and approaches to assessment should identify the extent to which they can apply the skills they have been developing. For example:

- How well do they deal with translating and interpreting texts?
- To what extent do they show their understanding of how the language works, its vocabulary and its language structures?
- Do they demonstrate a growing appreciation of the culture and heritage of the classical world?

Progression in knowledge, understanding and skills will be demonstrated through the abilities of young people in dealing with texts of increasing length and complexity, in giving longer and more complex responses in writing, and by showing increasing confidence in carrying out tasks with reducing levels of support. Approaches to assessment should also provide evidence of enjoyment, curiosity, and thinking and analytical skills. They will include identifying the extent to which children and young people apply their classical language skills in other areas of their learning and daily lives, including becoming more competent communicators in English. Assessment should also link with other areas of the curriculum, inside and outside the classroom, offering children and young people opportunities to be increasingly aware of the cultural heritage and legacies of the Romans and Greeks.

How does the classical languages framework connect with other areas of the curriculum?

Language learning is greatly enhanced where it is linked to or embedded in the wider curriculum so that children and young people can enjoy exploring and using language in meaningful contexts. By the time they begin their study of classical languages, learners will have acquired their home language(s) and will have begun to study English and possibly a modern language. Very importantly, teachers can make great use of opportunities to link learning in classical languages not only with progress in English or Gàidhlig and literacy, but also with other languages used by people in the school community. In this way, young people will be encouraged to explore and experiment with sound patterns and make links and comparisons between languages. Thus, learners will understand that in working towards the third level outcomes, they will be building on the skills already acquired in their earlier language and literacy learning.

A knowledge of Latin or classical Greek accelerates the learning of other languages, not only the Romance languages and Modern Greek, by providing young people with a structural framework for language acquisition in general. The interpretative skills taught through classical languages have direct links to English, the expressive arts and social studies; learning in areas of the curriculum such as science can be enhanced though knowledge of classical languages.

Classical languages Experiences and outcomes

Learning a new language encourages children and young people to broaden their horizons as they explore the language and its associated culture.

Through my learning of a classical language:

- I gain a deeper understanding of my first language and appreciate the richness and interconnected nature of languages
- I enhance my understanding and enjoyment of other cultures and of my own and gain insights into other ways of thinking and other views of the world
- I develop a range of analytical skills and can use these to extend and improve my learning in other subjects.

The study of language plays an important role in all language learning and the development of literacy skills.

I develop and extend my literacy skills when I have opportunities to:

- communicate, collaborate and build relationships
- reflect on and explain my literacy and thinking skills, using feedback to help me improve and sensitively provide useful feedback for others
- engage with and create a wide range of texts in different media, taking advantage of the opportunities offered by ICT
- develop my understanding of what is special, vibrant and valuable about my own and other cultures and their languages
- explore the richness and diversity of language, how it can affect me and the wide range of ways in which I and others can be creative
- extend and enrich my vocabulary through listening, talking, watching and reading.

Classical langua	Classical languages						
	Standard 3	Standard 4					
Translating texts	By developing my knowledge of how a classical language works, I can analyse straightforward sentences or short passages and translate them into appropriate English.	By applying my understanding of grammatical processes in a classical language, I can analyse more complex sentences and longer passages and translate them into appropriate and accurate English.					
Interpretation of texts	Individually and with others, I have used a range of resources and applied analytical skills. I can find specific information in a grammatically- straightforward passage in a classical language.	I can use a range of resources, and apply analytical skills to find specific information and the main ideas or themes of a passage in a classical language and make evaluative judgements, orally and in writing.					
Using knowledge about language	By applying my awareness of how classical Greek has linguistic links with English or Latin with English and other modern European languages which are based on Latin, I can enhance the range of my vocabulary and increase my confidence in communicating in English.	Through an awareness of features common to classical Greek and English, or Latin and English and other languages, I have enhanced the range of my vocabulary and increased my confidence in communicating in English. I can discuss how language reflects the thoughts, feelings and needs of different societies in the past and today.					
Culture and heritage	I have investigated the culture and heritage of the Greeks or Romans through language and literature. I can demonstrate my knowledge of their cultures by contributing to an oral or written presentation on their influences on the heritage of the modern world.	I have evaluated the culture and heritage of the Greeks or Romans through language and literature. I can demonstrate understanding of how their cultures have impacted in different ways on the culture and life in the modern world through an oral or written presentation of my research.					

curriculum for excellence: literacy and English

Literacy and English Principles and practice

Language and literacy are of personal, social and economic importance. Our ability to use language lies at the centre of the development and expression of our emotions, our thinking, our learning and our sense of personal identity. Language is itself a key aspect of our culture. Through language, children and young people can gain access to the literary heritage of humanity and develop their appreciation of the richness and breadth of Scotland's literary heritage. Children and young people encounter, enjoy and learn from the diversity of language used in their homes, their communities, by the media and by their peers.

Literacy is fundamental to all areas of learning, as it unlocks access to the wider curriculum. Being literate increases opportunities for the individual in all aspects of life, lays the foundations for lifelong learning and work, and contributes strongly to the development of all four capacities of *Curriculum for Excellence*.

The Literacy and English framework promotes the development of critical and creative thinking as well as competence in listening and talking, reading, writing and the personal, interpersonal and team-working skills which are so important in life and in the world of work. The framework provides, for learners, parents and teachers, broad descriptions of the range of learning opportunities which will contribute to the development of literacy, including critical literacy, creativity, and knowledge and appreciation of literature and culture.

Traditionally, all aspects of the language framework were developed by all practitioners in pre-school establishments and primary schools and by the English department in secondary schools. This will continue to be the case, but the framework recognises that all practitioners in secondary schools and in colleges and youth work settings have important responsibilities for and contributions to make towards the development of literacy.

How is the literacy and English framework structured?

The framework opens with a set of statements that describe the kinds of activity which all children and young people should experience throughout their learning, to nurture their skills and knowledge in literacy and language. Teachers will use them, alongside the more detailed experiences and outcomes, in planning for learning and teaching.

The statements of experiences and outcomes themselves include both literacy and English statements and emphasise that learning is an *active* process: for example, the outcomes stress *making* notes, rather than the passive activity implied by *taking* notes. Experiences represent important continuing aspects of learning such as exploring and enjoying text, and outcomes describe stages in the development of skills and understanding.

The three organisers within the literacy and English framework are the same as those used in the literacy and Gàidhlig, Gaelic (learners) and modern languages frameworks:

- listening and talking
- reading
- writing.

Within these organisers there are subdivisions.

Enjoyment and choice experiences and outcomes highlight the importance of providing opportunities for young people to make increasingly sophisticated choices.

The *tools* sections include important skills and knowledge: for example, in reading it includes such important matters as reading strategies, spelling and grammar.

The sections on *finding and using information* include, in reading, critical literacy skills; while the *understanding, analysing and evaluating* statements encourage progression in understanding of texts, developing not only literal understanding but also the higher order skills.

Finally, the *creating texts* experiences and outcomes describe the kind of opportunities which will help children and young people to develop their ability to communicate effectively, for example, by writing clear, well-structured explanations.

The experiences and outcomes have been written in an inclusive way which will allow teachers to interpret them for the needs of individual children and young people who use Braille, sign language and other forms of communication. This is exemplified in the words 'engaging with others' and 'interacting' within the listening and talking outcomes.

Effective learning and teaching in literacy and English

Throughout their education, children and young people should experience an environment which is rich in language and which sets high expectations for literacy and the use of language. Children and young people need to spend time with stories, literature and other texts which will enrich their learning, develop their language skills and enable them to find enjoyment. Spoken language has particular importance in the early years. Teachers will balance play-based learning with more systematic development and learning of skills and techniques for reading, including phonics.

Throughout education, effective learning and teaching in literacy and English will involve a skilful mix of appropriate approaches including:

- the use of relevant, real-life and enjoyable contexts which build upon children and young people's own experiences
- effective direct and interactive teaching
- a balance of spontaneous play and planned activities
- harnessing the motivational benefits of following children and young people's interests through responsive planning
- collaborative working and independent thinking and learning
- making meaningful links for learners across different curriculum areas
- building on the principles of Assessment is for Learning
- frequent opportunities to communicate in a wide range of contexts, for relevant purposes and for real audiences within and beyond places of learning
- the development of problem-solving skills and approaches
- the appropriate and effective use of ICT.

The balance between these approaches will vary at different stages and across different sectors and areas of the curriculum. Continuing dialogue about learning and teaching approaches within and across sectors will help to ensure continuity and progression.

The experiences and outcomes seem very broad – what if I'm not sure about progression within and between levels?

The experiences and outcomes embody appropriate levels of proficiency at each level but do not place a ceiling on achievement. The range of experiences allows for different rates of progression and for additional depth or breadth of study through the use of different contexts for learning. Progression within and across levels will take place in a range of ways, including:

- continuing development and consolidation of the range of skills
- increasing independence in applying these skills, and the ability to use them across a widening range of contexts in learning and life
- gradually decreasing levels of support used by the learner (for example from teachers, classroom assistants, parents or peers), and reduced reliance upon techniques such as wordlists or writing frames
- the ability to mediate discussions without teacher intervention
- in reading, the increasing length and complexity of text (for example the text's ideas, structure and vocabulary)
- in talking and writing, the increasing length, complexity and accuracy of response
- increasing awareness of how to apply language rules effectively.

At all levels, teachers will plan to enable learners to develop their skills with increasing depth over a range of contexts. This will be especially important at early level for those young people who may require additional support.

What is meant by literacy?

In defining literacy for the 21st century we must consider the changing forms of language which our children and young people will experience and use. Accordingly, the definition takes account of factors such as the speed with which information is shared and the ways it is shared. The breadth of the definition is intended to 'future proof' it. Within *Curriculum for Excellence*, therefore, literacy is defined as:

the set of skills which allows an individual to engage fully in society and in learning, through the different forms of language, and the range of texts, which society values and finds useful.

The literacy experiences and outcomes promote the development of skills in using language, particularly those that are used regularly by everyone in their everyday lives. These include the ability to apply knowledge about language. They reflect the need for young people to be able to communicate effectively both face-to-face and in writing through an increasing range of media. They take account of national and international research and of other skills frameworks. They recognise the importance of listening and talking and of effective collaborative working in the development of thinking and in learning.

In particular, the experiences and outcomes address the important skills of critical literacy. Children and young people not only need to be able to read for information: they also need to be able to work out what trust they should place on the information and to identify when and how people are aiming to persuade or influence them.

What about literacy across the curriculum?

The importance of the development of literacy skills across all areas of the curriculum is stressed in *Building the Curriculum 1.* All practitioners – from the early years, through primary and secondary education, in youth work settings and in colleges – are in a position to make important contributions to developing and reinforcing the literacy skills of children and young people, both through the learning activities which they plan and through their interaction with children and young people. Schools and their partners need to ensure a shared understanding of these responsibilities and that the approaches to learning and teaching will enable each child and young person to make good progress in developing their literacy and language skills. In order to highlight the shared nature of these responsibilities, the literacy experiences and outcomes also appear as a separate document, and implications for learning and teaching are explored further in the document which accompanies it.

What is the connection between literacy and English and other frameworks?

Close attention has been paid to matching with Scottish Credit and Qualifications Framework (SCQF). The level of achievement at the fourth level has been designed to approximate to that associated with SCQF level 4.

Links with other areas of the curriculum

In addition to the opportunities to develop literacy in all aspects of learning, there are strong connections between learning in English and learning in other areas of the curriculum. There are close links, for example, between the expressive arts and creative writing, and social studies and critical literacy. Interdisciplinary studies are likely to involve both research and a strong element of presentation and provide valuable opportunities to extend language skills. In numeracy, information handling outcomes link clearly to the critical literacy outcomes where learners are asked to assess the reliability of information.

Whatever the sector, whatever the subject area, young people will be:

- engaged in talking together to deepen their learning and thinking
- working together to prepare for reading unfamiliar texts
- reading a wide range of texts to gather and analyse information for a range of purposes
- writing clear explanations
- communicating information or opinions.

What is meant by 'texts'?

The definition of 'texts' needs to be broad and future proof: therefore within Curriculum for Excellence,

a text is the medium through which ideas, experiences, opinions and information can be communicated.

Reading and responding to literature and other texts play a central role in the development of learners' knowledge and understanding. Texts not only include those presented in traditional written or print form, but also orally, electronically or on film. Texts can be in continuous form, including traditional formal prose, or non-continuous, for example charts and graphs. The literacy and English framework reflects the increased use of multimodal texts, digital communication, social networking and the other forms of electronic communication encountered by children and young people in their daily lives. It recognises that the skills which children and young people need to learn to read these texts differ from the skills they need for reading continuous prose. Examples are given below.

Examples of texts	
novels, short stories, plays, poems reference texts the spoken word charts, maps, graphs and timetables advertisements, promotional leaflets comics, newspapers and magazines CVs, letters and emails films, games and TV programmes labels, signs and posters recipes, manuals and instructions reports and reviews t messages, blogs and social networking sites	
web pages, catalogues and directories	

In planning for learning in any curriculum area it is important for practitioners to ensure that children and young people encounter a wide range of different types of text in different media. As they progress in their learning, children and young people will encounter texts of increasing complexity in terms of length, structure, vocabulary, ideas and concepts.

What about Scots and Scottish texts?

The languages, dialects and literature of the world provide a rich resource for children and young people to learn about Scotland's culture, identity and language. Through engaging with a wide range of texts they will develop an appreciation of the vibrant literary and linguistic heritage and its indigenous languages and dialects. This principle suffuses the experiences and outcomes and it is expected that practitioners will build upon the diversity of language represented within the communities of the world, valuing the languages which children and young people bring to school.

What are broad features of assessment in literacy and English?

(This section should be read alongside the advice for literacy.)

Assessment in literacy and English will focus on the responses of children and young people to the language and to the ideas and information that they find in texts, and on the development and application of their skills in listening and talking, reading and writing.

Teachers will see evidence of their progress through children and young people's growing skills in communicating their thinking and using language appropriately for different purposes and audiences. Much of the evidence will be gathered as part of day-to-day learning. The use of specific assessment tasks is also important to provide evidence of progress, particularly at transitions.

Assessment of progress in literacy and English will focus on judgements about the success of children and young people in developing key literacy and English language skills and applying their skills in their learning and in their daily lives and in preparing for the world of work. For example:

- How well are they communicating with confidence to suit their purpose and audience and showing increasing awareness of others in interactions?
- How does their confidence in listening and talking help their personal development, social skills and ability to solve problems?
- To what extent are they exploring and enjoying fiction and non-fiction texts of increasing depth, complexity and variety and making increasingly sophisticated personal responses?
- How well do they engage with challenging issues raised in texts?

Long-term success in using literacy and English is closely linked to learners' motivation and capacity to engage with and complete tasks and assignments. For this reason, it is important to observe and discuss their enthusiasm for stories, poetry and prose, their interest in words, their preferences in reading, and their enthusiasm for sharing experiences through talk and writing. Their progress can be seen, for example, in their increasingly creative use of language and their developing appreciation of literature and culture.

Literacy and English Experiences and outcomes

The development of literacy skills plays an important role in all learning.

I develop and extend my literacy skills when I have opportunities to:

- communicate, collaborate and build relationships
- reflect on and explain my literacy and thinking skills, using feedback to help me improve and sensitively provide useful feedback for others
- engage with and create a wide range of texts¹ in different media, taking advantage of the opportunities offered by ICT
- develop my understanding of what is special, vibrant and valuable about my own and other cultures and their languages
- explore the richness and diversity of language², how it can affect me, and the wide range of ways in which I and others can be creative
- extend and enrich my vocabulary through listening, talking, watching and reading.

In developing my English language skills:

- I engage with a wide range of texts and am developing an appreciation of the richness and breadth of Scotland's literary and linguistic heritage
- I enjoy exploring and discussing word patterns and text structures.

¹ Texts are defined in the principles and practice paper. They will include texts which are relevant to all areas of learning, and examples of writing by authors which relate to the history, heritage and culture of the world. They may also include writing in other languages that has been translated.

² The languages of the world will include the languages which children and young people bring to the classroom and other settings.

Listening and talking							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Enjoyment and choice	 I enjoy exploring and playing with the patterns and sounds of language, and can use what I learn.³ I enjoy exploring and choosing stories and other texts to watch, read or listen to, and can share my likes and dislikes. I enjoy exploring events and characters in stories and other texts, sharing my thoughts in different ways. 	I regularly select and liste enjoy and find interesting prefer certain sources. I regularly select subject, resources to create texts	purpose, format and	I regularly select and listen to or and interest, and I can express and expectations, and I can give my personal response. I can regularly select subject, pu to create texts of my choice, and style.	how well they meet my needs e reasons, with evidence, for urpose, format and resources		

³ The literacy experiences and outcomes which are the responsibility of all teachers are shown in italics.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Tools for listening and talking - to help me when interacting or presenting within and beyond my place of learning	As I listen and take part in conversations, I discover new words and phrases. I use these to help talk to, play and work with others.	As I listen and take part in conversations, I can use new words and phrases to help me to communicate.	As I listen and take part in conversations, I can use new words, phrases and Gàidhlig idiom to help me to engage in a coherent manner using extended vocabulary and more complex language structures.	As I listen and take part in conversations, I can use familiar and new vocabulary, phrases and Gàidhlig idiom to engage in a coherent manner using extended vocabulary and more complex language structures.	As I listen and take part in conversations, I can use familiar and new vocabulary phrases and Gàidhlig idiom to help me to engage in a coherent manner using extended vocabulary and more complex language structures.

Listening and talking (continued)						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Tools for listening (continued) - to help me when interacting or presenting within and beyond my place of learning	As I listen and talk in different situations, I am learning to take turns and am developing my awareness of when to talk and when to listen.	When I engage with others, I know when and how to listen, when to talk, how much to say, when to ask questions and how to respond with respect.	When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking.	When I engage with others, I can make a relevant contribution, encourage others to contribute and acknowledge that they have the right to hold a different opinion. I can respond in ways appropriate to my role and use contributions to reflect on, clarify or adapt thinking.	When I engage with others I can make a relevant contribution, ensure that everyone has an opportunity to contribute and encourage them to take account of others' points of view or alternative solutions. I can respond in ways appropriate to my role, exploring and expanding on contributions to reflect on, clarify or adapt thinking.	
		I am exploring how pace, gesture, expression, emphasis and choice of words are used to engage others, and I can use what I learn.	I can recognise how the features of spoken language can help in communication, and I can use what I learn. I can recognise different features of my own and others' spoken language.	Having explored and analysed the features of spoken language, I can use these, adopting an appropriate register to suit my purpose and audience.	Having explored and analysed the features of spoken language, I can use these independently, adopting and sustaining an appropriate register to suit my purpose and audience.	

Listening and ta	Listening and talking (continued)						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Finding and using Information	I listen or watch for useful or interesting information and I use this to make choices or learn new things.	As I listen or watch, I can identify and discuss the purpose, key words and main ideas of the text, and use this information for a specific purpose.	As I listen or watch, I can identify and discuss the purpose, main ideas and supporting detail contained within the text, and use this information for different purposes.	 As I listen or watch, I can: identify and give an accurate account of the purpose and main concerns of the text, and can make inferences from key statements identify and discuss similarities and differences between different types of text use this information for different purposes. 	 As I listen or watch, I can: clearly state the purpose and main concerns of a text and make inferences from key statements compare and contrast different types of text gather, link and use information from different sources and use this for different purposes. 		
		As I listen or watch, I am learning to make notes under given headings and use these to understand what I have listened to or watched and create new texts.	As I listen or watch, I can make notes, organise these under suitable headings and use these to understand ideas and information and create new texts, using my own words as appropriate.	As I listen or watch, I can make develop thinking, help retain an issues and create new texts, us appropriate.	d recall information, explore		
		I can select ideas and relevant information, organise these in a logical sequence and use words which will be interesting and/or useful for others.	I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience.	I can independently select idea different purposes, organise es any supporting detail in a logica vocabulary to communicate effe	sential information or ideas and al order, and use suitable		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Understanding, analysing and evaluating – investigating and/or appreciating texts with increasingly complex ideas, structures and specialist vocabulary for different purposes	To help me understand stories and other texts, I ask questions and link what I am learning with what I already know.	I can show my understanding of what I listen to or watch by responding to and asking different kinds of questions.	I can show my understanding of what I listen to or watch by responding to literal, inferential, evaluative and other types of questions, and by asking different kinds of questions of my own.	I can show my understanding of what I listen to or watch by commenting, with evidence, on the content and form of short and extended texts.	I can show my understanding of what I listen to or watch by giving detailed, evaluative comments, with evidence, about the content and form of short and extended texts.
		To help me develop an informed view, I am learning to recognise the difference between fact and opinion.	To help me develop an informed view, I can distinguish fact from opinion, and I am learning to recognise when my sources try to influence me and how useful these are.	To help me develop an informed view, I am learning about the techniques used to influence opinion and how to assess the value of my sources, and I can recognise persuasion.	To help me develop an informed view, I can identify some of the techniques use to influence or persuade an can assess the value of my sources.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Creating texts – applying the elements others use to create different types of short and extended texts with increasingly complex ideas, structures and vocabulary	Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message. I enjoy exploring events and characters in stories and other texts and I use what I learn to invent my own, sharing these with others in imaginative ways.	When listening and talking with others for different purposes, I can exchange information, experiences, explanations, ideas and opinions, and clarify points by asking questions or by asking others to say more.	 When listening and talking with others for different purposes, I can: share information, experiences and opinions explain processes and ideas identify issues raised and summarise main points or findings clarify points by asking questions or by asking others to say more. 	 When listening and talking with others for different purposes, I can: communicate information, ideas or opinions explain processes, concepts or ideas identify issues raised, summarise findings or draw conclusions. 	 When listening and talking with others for different purposes, I can: communicate detailed information, ideas or opinions explain processes, concepts or ideas with some relevant supporting detail sum up ideas, issues, findings or conclusions.
	As I listen and take part in conversations and discussions, I discover new words and phrases which I use to help me express my ideas, thoughts and feelings.	I can communicate clearly when engaging with others within and beyond my place of learning, using selected resources ⁴ as required.	clear, expressive way and I am learning to select and organise resources independently.		I can communicate in a clean expressive manner when engaging with others within and beyond my place of learning, and can independently select and organise appropriate resources as required.

⁴ This may include images, objects, audio, visual or digital resources.

Reading							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Enjoyment and choice – within a motivating and challenging environment, developing an awareness of the relevance of texts in my life	I enjoy exploring and playing with the patterns and sounds of language and can use what I learn. I enjoy exploring and choosing stories and other texts to watch, read or listen to, and can share my likes and dislikes.	I regularly select and read, which I enjoy and find inte why I prefer certain texts a	resting, and I can explain	I regularly select and read, listen to or watch texts for enjoyment and interest, and I can express how well they meet my needs and expectations and give reasons, with evidence, for my personal response. I can identify sources ⁵ to develop the range of my reading.	I regularly select and read, listen to or watch texts for enjoyment and interest, and I can express how well they meet my needs and expectations and give reasons, with evidence, for my personal response. I can independently identify sources to develop the range of my reading.		

⁵ Sources should be interpreted in the broadest sense, for example, traditional sources such as libraries and also the full range of digital and interpersonal opportunities to learn about texts.

Reading (continue	d)				
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
- to help me use texts with increasingly complex or unfamiliar ideas, structures and	<i>I explore sounds, letters and words, discovering how they work together, and I can use what I learn to help me as I read and write.</i>	I can use my knowledge of sight vocabulary, phonics, context clues, punctuation and grammar to read with understanding and expression.	s, ith		
		I am learning to select and use strategies and resources before I read, and as I read, to help make the meaning of texts clear.	I can select and use a range of strategies and resources before I read, and as I read, to make meaning clear and give reasons for my selection.	I can select and use the strategies and resources I find most useful before I read, and as I read, to monitor and check my understanding.	Before and as I read, I can apply strategies and use resources independently to help me read a wide variety of texts and/or find the information I need.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Finding and using information - when reading and using fiction and non- fiction texts with increasingly complex ideas, structures and specialist vocabulary	I use signs, books or other texts to find useful or interesting information and I use this to plan, make choices or learn new things.	Using what I know about the features of different types of texts, I can find, select, sort and use information for a specific purpose.	Using what I know about the features of different types of texts, I can find, select and sort information from a variety of sources and use this for different purposes.	Using what I know about the featu texts, I can find, select, sort, sum information from different sources	marise, link and use
		I am learning to make notes under given headings and use them to understand information, explore ideas and problems and create new texts.	I can make notes, organise them under suitable headings and use them to understand information, develop my thinking, explore problems and create new texts, using my own words as appropriate.	I can make notes and organise th help retain and recall information, new texts, using my own words a	explore issues and create

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Understanding, analysing and evaluating - investigating and/or appreciating fiction and non-fiction texts with increasingly complex ideas, structures and specialist vocabulary for different purposes	To help me understand stories and other texts, I ask questions and link what I am learning with what I already know.	To show my understanding across different areas of learning, I can identify and consider the purpose and main ideas of a text.	To show my understanding across different areas of learning, I can identify and consider the purpose and main ideas of a text and use supporting detail.	 To show my understanding across different areas of learning, I can: identify and consider the purpose, main concerns or concepts and use supporting detail make inferences from key statements identify and discuss similarities and differences between different types of text. 	 To show my understanding across different areas of learning, I can: clearly state the purpose main concerns, concepts or arguments and use supporting detail make inferences from key statements and state these accurately in my own words compare and contrast different types of text.
		To show my understanding, I can respond to different kinds of questions and other close reading tasks and I am learning to create some questions of my own.	To show my understanding, I can respond to literal, inferential and evaluative questions and other close reading tasks and can create different kinds of questions of my own.	To show my understanding, I can comment, with evidence, on the content and form of short and extended texts, and respond to literal, inferential and evaluative questions and other types of close reading tasks.	To show my understanding, can give detailed, evaluative comments, with evidence, o the content and form of shor and extended texts, and respond to different kinds of questions and other types of close reading tasks.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Understanding, analysing and evaluating (continued) - investigating and/or appreciating fiction and non-fiction texts with increasingly complex ideas,		To help me develop an informed view, I can recognise the difference between fact and opinion.	To help me develop an informed view, I can identify and explain the difference between fact and opinion, recognise when I am being influenced, and have assessed how useful and believable my sources are.	To help me develop an informed view, I am exploring the techniques used to influence my opinion. I can recognise persuasion and assess the reliability of information and credibility and value of my sources.	To help me develop an informed view, I can recognise persuasion and bias, identify some of the techniques used to influence my opinion, and assess the reliability of information and credibility and value of my sources.
	<i>I enjoy exploring events and characters in stories and other texts, sharing my thoughts in different ways.</i>	I can share my thoughts about structure, characters and/or setting, recognise the writer's message and relate it to my own experiences, and comment on the effective choice of words and other features.	 I can: discuss structure, characterisation and/or setting recognise the relevance of the writer's theme and how this relates to my own and others' experiences discuss the writer's style and other features appropriate to genre. 	 I can: discuss and evaluate the structure, characterisation and/or setting using some supporting evidence identify the main theme of the text and recognise the relevance this has to my own and others' experiences identify and comment on aspects of the writer's style and other features appropriate to genre using some relevant evidence. 	 I can: discuss and evaluate the effectiveness of structure, characterisation and/or setting using some supporting evidence identify how the writer's main theme or central concerns are revealed and can recognise how they relate to my own and others' experiences identify and make a personal evaluation of the effect of aspects of the writer's style and other features appropriate to genre using some relevan evidence and terminology

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Enjoyment and choice - within a motivating and challenging environment, developing an awareness of the relevance of texts in my life	I enjoy exploring and playing with the patterns and sounds of language and can use what I learn.	<i>I enjoy creating texts of m</i> select subject, purpose, fo the needs of my audience	ormat and resources to suit	I enjoy creating texts of my choice own style. I can regularly select su resources to suit the needs of my	ibject, purpose, format and

Writing (continued)				
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
 Tools for writing using knowledge of technical aspects to help my writing communicate effectively within and beyond my place of learning As I play and learn, I enjoy exploring interesting materials for writing and different ways of recording my experiences and feelings, ideas and information. 	letters and words, discovering how they work together, and I can use what I learn to help me as I read or	I can spell the most commonly-used words, using my knowledge of letter patterns and spelling rules and use resources to help me spell tricky or unfamiliar words.	I can spell most of the words I need to communicate, using spelling rules, specialist vocabulary, self-correction techniques and a range of resources.	I can use a range of strategies and resources and spell most of the words I need to use, including specialist vocabulary, and ensure that my spelling is accurate.	I can use a range of strategies and resources independently and ensure that my spelling, including specialist vocabulary, is accurate.
	I can write independently, use appropriate punctuation and order and link my sentences in a way that makes sense.	In both short and extended texts, I can use appropriate punctuation, vary my sentence structures and divide my work into paragraphs in a way that makes sense to my reader.	As appropriate to my purpose of punctuate and structure differed sufficient accuracy, and arrang clear, showing straightforward paragraphs.	nt types of sentences with the these to make meaning	
		Throughout the writing process, I can check that my writing makes sense.	Throughout the writing process, I can check that my writing makes sense and meets its purpose.	Throughout the writing process, I can review and edit my writing to ensure that it meets its purpose and communicates meaning at first reading.	Throughout the writing process, I can review and edit my writing independently to ensure that it meets its purpose and communicates meaning clearly at first reading.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Tools for writing (continued)		I can present my writing in a way that will make it legible and attractive for my reader, combining words, images and other features.	I consider the impact that layout and presentation will have and can combine lettering, graphics and other features to engage my reader.	I can consider the impact that layout and presentation will have on my reader, selecting and using a variety of features appropriate to purpose and audience.	I can justify my choice and use of layout and presentation in terms of the intended impact on my reader.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Organising and using information		I am learning to use my notes and other types of writing to help me understand information and ideas, explore problems, generate and develop ideas or create new text.	I can use my notes and other types of writing to help me understand information and ideas, explore problems, make decisions, generate and develop ideas or create new text. I recognise the need to acknowledge my sources and can do this appropriately.	I can use notes and other types of writing to generate and develop ideas, retain and recall information, explore problems, make decisions, generate and develop ideas or create original text. I recognise when it is appropriate to quote from sources and when I should put points into my own words. I can acknowledge my sources appropriately.	I can use notes and other types of writing to generate and develop ideas, retain and recall information, explore problems, make decisions, or create originat text. I can make appropriate and responsible use of sources and acknowledge these appropriately.
	Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message.	By considering the type of text I am creating, ⁶ I can select ideas and relevant information, organise these in a logical sequence and use words which will be interesting and/or useful for others.	By considering the type of text I am creating, I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience.	By considering the type of text I am creating, I can independently select ideas and relevant information for different purposes, and organise essential information or ideas and any supporting detail in a logical order. I can us suitable vocabulary to communicate effectively with my audience.	

⁶ These will include the range of texts and media described in the principles and practice paper.

Writing (continued)					
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Creating texts – applying the elements which writers use to create different types of short			I am learning to use language and style in a way which engages and/or influences my reader.	I can engage and/or influence language, style and tone as ap	
and extended texts with increasingly complex ideas, structures and vocabulary		I can convey information, describe events or processes, share my opinions or persuade my reader in different ways.	<i>I can convey information, describe events, explain processes or combine ideas in different ways.</i>	I can convey information, describe events, explain processes or concepts, and combine ideas in different ways.	I can convey information and describe events, explain processes or concepts, providing substantiating evidence, and synthesise ideas or opinions in different ways.
			I can persuade, argue, explore issues or express an opinion using relevant supporting detail and/or evidence.	I can persuade, argue, evaluate, explore issues or express an opinion using a clear line of thought, relevant supporting detail and/or evidence.	I can persuade, argue, evaluate, explore issues or express and justify opinions within a convincing line of thought, using relevant supporting detail and/or evidence.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Creating texts (continued)		I can describe and share my experiences and how they made me feel.	As I write for different purposes and readers, I can describe and share my experiences, expressing what they made me think about and how they made me feel.	I can recreate a convincing impression of a personal experience for my reader, sharing my feelings and reactions to the changing circumstances with some attempt at reflection.	I can create a convincing impression of my personal experience and reflect on my response to the changing circumstances to engage my reader.
	I enjoy exploring events and characters in stories and other texts and I use what I learn to invent my own, sharing these with others in imaginative ways.	Having explored the elements which writers use in different genres, I can use what I learn to create my own stories, poems and plays with interesting structures, characters and/or settings.	Having explored the elements which writers use in different genres, I can use what I learn to create stories, poems and plays with an interesting and appropriate structure, interesting characters and/or settings which come to life.	 Having explored the elements which writers use, I can create texts in different genres by: integrating the conventions of my chosen genre successfully and/or using convincing and appropriate structures and/or creating interesting and convincing characters and/or building convincing settings which come to life. 	 Having explored and experimented with the narrative structures which writers use to create texts in different genres, I can: use the conventions of my chosen genre successfully and/or create an appropriate mood or atmosphere and/or create convincing relationships, actions and dialogue for my characters.

curriculum for excellence: modern languages

Modern languages Principles and practice

What can learning in modern languages enable children and young people to achieve?

Learning other languages enables children and young people to make connections with different people and their cultures and to play a fuller part as global citizens.

Learning through the languages area of the curriculum enables children and young people to:

- develop their ability to communicate their thoughts and feelings and respond to those of other people
- develop the high level of skills in listening, talking, reading and writing which are essential for learning, work and life
- use different media effectively for learning and communication
- develop a secure understanding of how language works, and use language well to communicate ideas and information in English and other languages
- exercise their intellectual curiosity by questioning and developing their understanding, and use creative and critical thinking to synthesise ideas and arguments
- enhance their enjoyment and their understanding of their own and other cultures through literature and other forms of language
- develop competence in different languages so that they can understand and communicate including, for some, in work settings.

Building the Curriculum 1

It is important for the nation's prosperity that young people are attracted to learning a modern language and that they become confident users of a modern language, well equipped with the skills needed in the new Europe and in the global marketplace. This framework of experiences and outcomes is intended to help to address this national need.

Through their planning of a wide and rich range of learning activities in modern languages to develop literacy and language skills teachers will support children and young people to become:

- **successful learners**, who can reflect on how they have acquired and learned their first language and how this can assist them in further language learning
- confident individuals, who, through experiencing success and support, can interact with others in real-life situations, talk about topics of personal interest and deliver presentations in their new language
- effective contributors, who can work in individual, paired and group situations, and establish and maintain contact with other speakers of the target language
- **responsible citizens**, who have a growing awareness of life in another society and of the issues facing citizens in the countries where their new language is spoken.

The ability to use language lies at the centre of thinking and learning. The interconnected nature of language learning lies at the heart of the modern languages experiences and outcomes.

By the time they begin their study of a modern language, learners will have acquired their home language(s) and will have begun to study English in a school context. Both primary and secondary teachers are in an ideal position to help children and young people to reflect on what they have already achieved in English and in other home or community languages (for example, how to listen, speak, read, write and how to understand phonics), and how this will help them to learn a new language. However, the learning of a new language also provides the opportunity to help learners to reflect on their first language and actively seek comparisons between the features of their first and second languages. In this way, teachers of modern languages have a unique contribution to make in helping learners not only to reflect on the skills required to learn a new language, but also to revisit, improve and understand more securely aspects of literacy in their first language.

The study of a modern language has a unique contribution to make to the development of cultural awareness as it provides children and young people with a means of communicating directly with people from different cultures, enhancing their understanding and enjoyment of other cultures and of their own. They gain insights into other ways of thinking and other views of the world and therefore develop a much richer understanding of active citizenship.

Modern languages: principles and practice

One of the key aims of modern languages teaching is to develop young people's 'communicative competence' so that they are able to use and enjoy the language effectively in real situations and for a range of relevant purposes in work and leisure throughout their life.

How is the modern languages framework structured?

The introductory statements for modern languages highlight three key aims of learning modern languages which make a unique contribution to the aims of *Curriculum for Excellence*: the interconnected nature of languages, active citizenship and communicative competence.

The experiences and outcomes for modern languages are described at second, third and fourth levels. Schools and centres which implement an earlier start should work towards the outcomes described at second level, providing children with stimulating opportunities for early achievement of some or all of the second level outcomes and, in the longer term, opportunities for depth and breadth of learning.

In order to make clear the links between learning in English, Gaelic, Gàidhlig and modern languages, the experiences and outcomes in all of these areas are organised within the same structure. The organisers are:

- listening and talking
- reading
- writing.

Experiences and outcomes within each organiser are subdivided to group together similar skills. Teachers will use these lines of development to support and track progression in each skill across the three levels.

The level of achievement at the fourth level has been designed to approximate to that associated with SCQF level 4.

What learning and teaching approaches are useful in modern languages?

How does the framework promote effective teaching and learning where children start their learning of a modern language before P6?

Although Primary 6 is currently the most common point at which pupils begin to learn a modern language, many children begin earlier, including in pre-school. The experiences and outcomes take account of differing starting points.

At early and at first levels, children will be developing generic skills in their first language. These include taking part in conversations, developing listening, reading and writing skills and knowledge about language. All of these are relevant to learning other languages. Within modern languages at these stages teachers will build on children's natural curiosity for sounds and words, and their strong desire to communicate. Activities will include playing games, singing songs, carrying out simple instructions, and playing with simple poetry and rhyme. In this way they can begin to be enthusiastic, confident language learners from the outset.

Whenever they start their learning of another language, children need to experience success by taking part in practical activities that they can enjoy. Language learning is greatly enhanced where it is linked to or embedded in the wider curriculum so that children and young people can enjoy exploring and using language in meaningful contexts. Very importantly, teachers can make great use of opportunities to link language learning with progress in English and with other languages used by people in the school community, enabling children to explore and experiment with sound patterns and make links and comparisons between languages.

What does the framework mean more generally for teachers?

Learning in the modern languages provides opportunities to create relevant, coherent, enjoyable and successful learning experiences which include the following four elements:

- awareness of the skills required to be an effective learner of languages
- awareness of social, cultural and geographical aspects of the countries where a particular language is spoken
- knowledge about language structures that allows the learner to check the accuracy of her/his language use and to create new language
- the ability to communicate in relevant and realistic contexts.

As children and young people develop their modern language skills, teachers will plan to achieve an appropriate balance between the development of language learning skills and the development of competence in the new language. This may involve changing the balance of these four elements: the first two of these elements being more predominant in the earlier stages of language learning and the final two being more predominant in later language learning.

The open-ended nature of the experiences and outcomes allows for creativity and flexibility and allows primary teachers to focus on teaching methodologies for skills development and for a deeper understanding without having to plan for too much content/topic coverage.

The statements of experiences and outcomes provide support to primary teachers as they plan to:

- establish a solid basis for the lifelong learning of modern languages
- ensure that young people experience success and retain initial enthusiasm
- achieve balance between coverage of language content and development of effective language learning skills
- discuss similarities and differences of how pupils have acquired and learned their first or home language and how this impacts on the learning of a second language
- encourage young people to investigate and report back on aspects of culture and geography.

As teachers use these statements of experiences and outcomes to support their planning, by the end of Primary 7, the majority of children will have learned the skills necessary to:

- give a short presentation about themselves
- take part in simple conversations and transactions
- understand classroom instructions and personal information
- enjoy listening to a story, song or poem
- read aloud a simple text
- read and understand a short text
- write a few sentences about themselves and others.

The framework supports secondary teachers in liaising closely with primary teachers to build not only on what has been achieved but also on the learning experiences with which children and young people will be increasingly familiar.

By embedding the principles of Assessment is for Learning within their classrooms, teachers will encourage young people to reflect on, to take increasing ownership of and to assume more responsibility for their own learning; they will make use of self-assessment to identify their strengths and development needs from the evidence of their efforts and act on feedback given from peers as well as teachers in order to plan their next steps.

The statements of experiences and outcomes provide support to secondary teachers as they plan to:

- create meaningful relevant contexts for learning including the appropriate use of ICT
- · develop interdisciplinary projects where appropriate to build on collaborative learning
- make clear the links between the learning and teaching of modern languages and other areas of the young people's learning, including enterprise, international education and citizenship
- establish an acceptable level of competence approximating to SCQF Level 4 and achievable by most pupils by end of S3.

How can effective use of information and communications technology (ICT) help to improve learning and teaching?

Curriculum for Excellence offers an opportunity to further develop learning and teaching experiences that are relevant and enjoyable. This includes making effective use of information and communication technology to enhance teaching and learning, and to provide real-life contexts that motivate children and young people and help them to see a purpose to their language learning. Online research by teachers and learners alike will help them to develop their knowledge, understanding and appreciation of the culture surrounding the language which they are learning, and the use of ICT can bring them directly into contact with people from around the world.

Will the framework help to address the need for our young people to be equipped with high levels of language learning skills? Are we 'raising the bar' in terms of what we expect from our learners?

We are certainly raising the bar to the extent that, without placing a 'ceiling' on higher levels of achievement, we expect the majority of young people to achieve by the end of S3 a level of performance in each language skill which approximates to the level of performance associated with SCQF level 4. The achievement of fourth level outcomes represents a substantial and useful level of competence closely linked to Basic User level on the Common European Framework of Reference for Languages (CEFR).

How do we support progression through and between levels?

The experiences and outcomes for modern languages are described at second, third and fourth levels. The outcomes embody an appropriate level of proficiency at each level but do not place a ceiling on achievement. The range of experiences within the framework allows for different rates of progression.

Within the modern languages framework young people will demonstrate their progression as they move through levels in terms of:

- increasing independence and reduced level of support, including peer or teacher support, and support through wordlists and dictionaries
- increasing length and complexity of text and task in listening and reading
- increasing length, complexity and accuracy of response in talking and writing
- new areas of language content and language use (personal, transactional, language related to the world of work and to the culture of the countries in which the language is spoken)
- increasing awareness of language rules, including knowledge about language
- increasing confidence in taking the initiative (including asking for help) and sustaining communication.

What are broad features of assessment in modern languages?

Assessment in modern languages will focus on children and young people's progress in developing and applying their skills in listening, talking, reading and writing.

Teachers can gather evidence of progress as part of day-to-day learning during individual and collaborative activities, for example engaging in relevant conversation or correspondence with peers and adults about people, places and daily life where the language is spoken, and through talks, writing, and presentations, using ICT as appropriate. Specific assessment tasks will also be valuable in assessing progress. From the time when children and young people begin their learning of a modern language through to the senior stages, they will demonstrate progress in their skills in communication and language learning, in their knowledge about language structure, and in their awareness of social, cultural and geographical aspects.

Approaches to assessment should identify the extent to which children and young people can apply these skills in their learning and their daily lives and in preparing for the world of work. For example:

- How well do they contribute to discussions?
- Are they increasingly able to extract key information from texts?

Assessment of progress in modern languages involves making judgements about the success of children and young people in extending and using their vocabulary, increasing their comprehension of the written and spoken word, developing their understanding of language structures and rules and applying these accurately in familiar and new real-life situations, including in social contexts or in giving instructions or directions. For example, they:

- communicate with increasing confidence, accuracy and fluency
- demonstrate through responses their enthusiasm and motivation for modern language learning and their developing cultural and international awareness.

Assessment should promote enthusiasm, motivation and willingness to try out the language in other areas of the curriculum and beyond school. These will be indicators of children and young people's long-term success as modern language learners and global citizens.

How much time should schools devote to teaching modern languages?

There are no specific input requirements in terms of time allocations. The emphasis in modern languages is on ensuring that each learner achieves an acceptable level of proficiency in the language. This level of proficiency is linked to Basic User Level of the CEFR. The national expectation is that almost all young people study modern languages to the third level as part of their general education for our young people. This may be achieved in different ways:

Curriculum for Excellence allows for both professional autonomy and responsibility when planning and delivering the curriculum... The framework provides flexibility to organise, schedule and deliver the experiences and outcomes in ways that meet the needs of all learners, but also provides reassurance about consistency where necessary.

Such flexibility will result in a more varied pattern of curriculum structures to reflect local needs and circumstances.

Building the Curriculum 3

Connections with other areas of the curriculum

The study of any modern language plays a central role in the development of literacy skills. It can also contribute to the development of numeracy skills through, for example, learning and exploring the use of the number system in a new language. Learning a modern language provides opportunities for interdisciplinary work by providing a global dimension to a variety of curriculum areas and, particularly, to the areas of active citizenship and cultural awareness. Making connections between different areas of learning and developing relevant course content will be important in attracting our young people to learning a modern language.

Connections with other frameworks for language learning

The framework provides an opportunity for children and young people's achievement to be recognised at second, third and fourth levels. The level of achievement at fourth level is broadly equivalent to that associated with Scottish Credit and Qualifications Framework (SCQF) Level 4.

Curriculum for Excellence levels have been linked to those being developed as part of the CEFR so that the level of competence achieved by learners will have a European-wide equivalence. The CEFR comprehensively describes what language learners have to learn to do in order to use a language for communication and defines levels of proficiency which allow learners' progress to be measured at each stage of learning on a lifelong basis.

Modern languages Experiences and outcomes

Learning a new language encourages children and young people to broaden their horizons as they explore the language and its associated culture.

Through my learning of a new language:

- I gain a deeper understanding of my first language and appreciate the richness and interconnected nature of languages
- I enhance my understanding and enjoyment of other cultures and of my own and gain insights into other ways of thinking and other views of the world
- I develop skills that I can use and enjoy in work and leisure throughout my life.

The study of language plays an important role in all language learning and the development of literacy skills.

I develop and extend my literacy skills when I have opportunities to:

- communicate, collaborate and build relationships
- reflect on and explain my literacy and thinking skills, using feedback to help me improve and sensitively provide useful feedback for others
- engage with and create a wide range of texts in different media, taking advantage of the opportunities offered by ICT
- develop my understanding of what is special, vibrant and valuable about my own and other cultures and their languages
- explore the richness and diversity of language, how it can affect me and the wide range of ways in which I and others can be creative
- extend and enrich my vocabulary through listening, talking, watching and reading.

Listening and tal	king		
	Standard 2	Standard 3	Standard 4
Listening for information	I explore the patterns and sounds of language through songs and rhymes and show understanding and enjoyment by listening, joining in and responding. I take an active part in daily routines, responding to instructions which are accompanied by gesture and expression. I can listen to and show understanding of familiar instructions and language from familiar voices and sources.	I can listen to and show understanding of mainly familiar language and instructions from a variety of sources, where the sentences are longer and where there may be more than one speaker.	I can listen to and show understanding of language from a variety of sources, including unfamiliar speakers, where the sentences are more complex, less predictable, and contain some unfamiliar language or known language used in unfamiliar contexts.
Listening and talking with others	I explore how gesture, expression and emphasis are used to help understanding. I can listen and respond to familiar voices in short, predictable conversations using straightforward language and non-verbal techniques as appropriate such as gesture and eye contact.	I can listen and respond to others in mainly predictable, more extended conversations using familiar language and non-verbal techniques as appropriate.	I can listen and respond to others, including sympathetic fluent speakers of the language, in extended conversations that are less predictable.

Listening and talking (continued)

	Standard 2	Standard 3	Standard 4
Listening and talking with others (continued)	When listening and talking with others, I am developing an awareness of when to listen and when to talk. I am learning new words which I use to share information about myself and others.	I can take part effectively in prepared conversations by using a variety of language structures to share information, experiences and opinions and by offering straightforward reasons for having these opinions.	I can take part effectively in more detailed conversations using an extended range of language structures to exchange information, experiences, feelings and opinions and by offering more detailed reasons for having these opinions.
	I can take part effectively in prepared conversations by sharing information about myself and others or interests of my choice, using familiar vocabulary and basic language structures.		
	I can ask for help confidently using learned phrases and familiar language.	I can support a conversation by asking for help, seeking repetition and asking simple questions.	I can start, support and sustain a conversation by, for example, asking relevant questions and by seeking help when necessary.
	I explore simple songs and rhymes and I enjoy learning with others as we talk and listen together. I can participate in familiar collaborative activities including games, paired speaking and short role plays.	I can participate in a range of collaborative activities, including games, paired speaking and structured role plays, in a range of realistic contexts set mainly in a country where the language I am learning is spoken.	I can collaborate to prepare and present more open-ended role plays in a wide range of realistic contexts set both in my own country and in a country where the language I am learning is spoken.

	Standard 2	Standard 3	Standard 4
Organising and using information	I can deliver a brief presentation on a familiar topic using familiar language and phrases. I have worked with others, using a variety of media including ICT where appropriate, and can contribute successfully to a presentation in English, supported by use of the language I am learning, on an aspect of life in a country where the language I am learning is spoken.	I have contributed successfully to a group to plan and prepare short talks in the language I am learning on topics of personal interest or linked to an aspect of a country where the language I am studying is spoken. I can deliver an individual presentation in the language I am learning, using a variety of media including ICT where appropriate.	I can, using a variety of media including ICT where appropriate, plan, prepare and deliver an individual presentation in the language I am learning on topics of personal interest or linked to an aspect of a country where the language I am studying is spoken.
Using knowledge about language	I explore comparisons and connections between sound patterns in different languages through play, discussion and experimentation. I can use my knowledge about language and pronunciation to ensure that others can understand me when I read aloud or say familiar words, phrases and short texts.	 I can apply my knowledge about language, intonation and pronunciation to: ensure that others can understand me when I pronounce familiar words or phrases help me work out how to pronounce unfamiliar words read a short text aloud with accuracy and confidence. 	 I can apply my knowledge about language, intonation and pronunciation to: ensure that others can understand me when I pronounce familiar and unfamiliar words and phrases help me work out how to read aloud familiar and unfamiliar texts with accuracy and confidence.

Reading						
	Standard 2	Standard 3	Standard 4			
Finding and using information	I work on my own and with others to understand text using appropriate resources, demonstrating my understanding by matching written words to pictures and by reconstructing the text in a logical sequence, for example. I can read and demonstrate understanding of words, signs, phrases and simple texts containing mainly familiar language.	I work on my own and with others to understand text using appropriate resources. I can read and demonstrate understanding of more complex texts which contain familiar and unfamiliar language.	Using a variety of resources, I can independently read text which is more detailed and which contains complex language including a range of tenses, and demonstrate my understanding.			

Reading (continued)						
	Standard 2	Standard 3	Standard 4			
Reading to appreciate other cultures	I work on my own and with others to read and discuss simple texts in the language I am learning. I can share simple facts about features of life in some of the countries where the language I am learning is spoken.	I work on my own and with others to read and explore texts in the language I am learning. I can demonstrate my knowledge about life and culture in some of the countries where the language I am learning is spoken.	I work on my own and with others to read and research texts in the language I am learning. I can demonstrate my understanding of different cultures and my appreciation of different ways of looking at the world in countries where the language I am learning is spoken.			
Reading for interest and enjoyment	I can choose and can read, on my own and with others, a variety of straightforward texts of different types, including non-fiction, short imaginative accounts, prose and poetry, which may have been adapted.	I can select and read for interest and enjoyment a range of texts, including longer imaginative texts in a variety of styles, both prose and poetry, which may have had some adaptation.	I can select and read for interest and enjoyment a range of more detailed texts containing complex language, including imaginative accounts, both prose and poetry, which use familiar and unfamiliar language and may have had some adaptation.			

Reading (continued)						
	Standard 2	Standard 3	Standard 4			
Using knowledge about language	I can understand how a bilingual dictionary works and use it with support. I can make comparisons and explore connections between spelling patterns in English and the language I am learning. I experiment with new language, working out the meaning of words and phrases using vocabulary I have learned so far. I can recognise and comment on other features of my own language which help to make sense of words in the language I am learning.	I can use a bilingual dictionary independently to help me understand new language. I can recognise features of words in the language I am learning and use them to make sense of vocabulary and of the connections between words.	I can use my knowledge about language and other strategies to help me to understand and analyse more detailed texts, containing some unfamiliar language and more complex structures.			

Writing	Writing							
	Standard 2	Standard 3	Standard 4					
Organising and using information	I use the support of others and access appropriate reference materials of my choice to help me plan my writing in ways that engage my reader, using ICT when appropriate.							
	writing, exploring and experimenting with words and phrases using resources, toextended information about myself and others, my experiences, or a topic of mywidening range of topics i formats, using some varies		I can write more extensively over a widening range of topics in a range of formats, using some variety of structures, tenses and linking words.					
	I can use familiar language to describe myself and to exchange straightforward information.	I can express opinions and can offer straightforward reasons for having those opinions.	I can write about experiences, feelings and opinions and can offer reasons for having those opinions.					
Using knowledge about language	I use my knowledge about language and success criteria to help me, and I can check that I have written familiar words and phrases accurately.	I can check the accuracy of my writing using my knowledge about language, the support of others and appropriate reference materials, including success criteria.	I can use my knowledge about language, including structure, spelling and punctuation, using success criteria to take responsibility for the accuracy of my writing.					

Appendix – Explanations

Listening for information

The expectation in this skill at second level is that young people will be able to understand a basic range of everyday expressions relating to personal details and classroom instructions (familiar language) and enjoy listening to a story, song or poem. They may need to listen several times to get the information they require depending on how fast and clearly the speaker talks. They should be aware of how people address each other both formally and informally.

Listening and talking with others

Across all levels, young people will take part in conversations (e.g. MLAN 2-02a/MLAN 2-03b), in collaborative / transactional situations (e.g. MLAN 2-05b) and in presentations (e.g. MLAN 2-06a/MLAN 2-06b), while being able to ask for help and support as necessary (e.g. MLAN 2-04a) and while ensuring pronunciation is sufficiently accurate to be understood by a sympathetic native speaker (e.g. MLAN 2-07b).

The expectation at second level is that young people will be able to give a short presentation about themselves, take part in simple conversations and transactions, and read aloud a simple text. Their pronunciation will not always be completely accurate but their meaning will be clear.

Reading

Across all levels, young people will read text in order to use and find information (e.g. MLAN 2-08b), to appreciate other cultures (e.g. MLAN 2-09a) and for interest and enjoyment (e.g. MLAN 2-10a), while developing a range of reading strategies including the use of dictionary (e.g. MLAN 2-11a), knowledge of English and, possibly, other languages with which they are familiar (e.g. MLAN 2-11b/MLAN 2-11d) and knowledge of the foreign language (e.g. MLAN 2-11c).

The expectation at second level is that young people will be able to understand the main points from a short written text presented in traditional print form or electronically and draw upon a range of support including glossaries, word lists, peer and teacher support.

Writing

Across all levels, young people will write in order to describe themselves and exchange straightforward information (e.g. MLAN 2-13b), developing awareness of the accuracy required in writing information previously used in speaking (e.g. MLAN 2-14a).

The expectation at second level is that young people will be able to write a few sentences about themselves and others using expressions which they have already learned and, with support, including writing frames, peer and teacher support, demonstrate an awareness of the writing system of the foreign language.

Explanation of terminology which is open to different interpretations

These explanations apply to all levels and all outcomes where those terms are used.

MLAN 4-01a 'Unfamiliar'

Unfamiliar language can either be previously known vocabulary presented in a new and unfamiliar context or this can be new, unfamiliar vocabulary which does not distract the listener from understanding the gist and the main points of the text.

MLAN 4-02a 'Predictable'

Language is predictable in that it is learned; however, the conversation is less predictable in that the precise format of the questions may vary, as may the order in which they are asked. There may also be more extended questions which draw on previous knowledge.

MLAN 4-03a '... using an extended range of language structures'

The ability to move beyond the use of fixed phrases and to demonstrate a variety of vocabulary and tenses is a key element in evaluating the extent to which the learner has met agreed success criteria for speaking. Guidance as to the appropriate level expected for conversations at SCQF Level 4 is currently available from SQA and this can be used as a point of reference.

MLAN 4-05a

Within transactional situations, young people will be able to both obtain a service (when abroad) and provide a service (when at home).

Guidance as to the appropriate level of learner's response expected for transactional role play at SCQF Level 4 is currently available from SQA and this can be used as a point of reference.

MLAN 4-06a

Young people will be able to speak at some length on a prepared topic, going beyond basic content and showing evidence of structure.

Guidance as to the appropriate level of learner's response expected for Prepared Talk/Presentation at SCQF Level 4 is currently available from SQA and this can be used as a point of reference.

MLAN 4-09a

This type of reading may lend itself to the use of the internet and other sources to access text which may in turn contribute to the speaking (MLAN 4-06a) and writing (MLAN 4-13b) presentations.

MLAN 2-10a, MLAN 3-10a, MLAN 4-10a

A text, spoken or written, may be seen as the medium through which ideas, experiences, opinions and information can be communicated. Text is made more demanding and more complex by the content, the length, the density of sentence structure and the range of vocabulary and structures.

Guidance concerning the level of text expected at SCQF Level 4 is currently available from SQA, and this can be used as a point of reference.

MLAN 4-13a

Teaching and learning should capitalise on the potential to increase motivation by the wide range of ways in which learners interact with others, including email, blogging, and scripting material for podcasting and video conferencing.

curriculum for excellence: mathematics

Mathematics Principles and practice

What can learning in mathematics enable children and young people to achieve?

Mathematics is important in our everyday life, allowing us to make sense of the world around us and to manage our lives. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

Mathematics plays an important role in areas such as science or technologies, and is vital to research and development in fields such as engineering, computing science, medicine and finance. Learning mathematics gives children and young people access to the wider curriculum and the opportunity to pursue further studies and interests.

Because mathematics is rich and stimulating, it engages and fascinates learners of all ages, interests and abilities. Learning mathematics develops logical reasoning, analysis, problem-solving skills, creativity and the ability to think in abstract ways. It uses a universal language of numbers and symbols which allows us to communicate ideas in a concise, unambiguous and rigorous way.

To face the challenges of the 21st century, each young person needs to have confidence in using mathematical skills, and the world needs both specialist mathematicians and a highly numerate population.

Building the Curriculum 1

Mathematics equips us with many of the skills required for life, learning and work. Understanding the part that mathematics plays in almost all aspects of life is crucial. This reinforces the need for mathematics to play an integral part in lifelong learning and be appreciated for the richness it brings.

How is the mathematics framework structured?

Within the mathematics framework, some statements of experiences and outcomes are also identified as statements of experiences and outcomes in numeracy. These form an important part of the mathematics education of all children and young people as they include many of the numerical and analytical skills required by each of us to function effectively and successfully in everyday life. All teachers with a responsibility for the development of mathematics will be familiar with the role of numeracy within mathematics and with the means by which numeracy is developed across the range of learning experiences. The numeracy subset of the mathematics experiences and outcomes is also published separately; further information can be found in the numeracy principles and practice paper.

The mathematics experiences and outcomes are structured within three main organisers, each of which contains a number of subdivisions:

Number, money and measure

- Estimation and rounding
- Number and number processes
- Multiples, factors and primes
- Powers and roots
- Fractions, decimal fractions and percentages
- Money
- Time
- Measurement
- Mathematics its impact on the world, past, present and future
- Patterns and relationships
- Expressions and equations.

Shape, position and movement

- Properties of 2D shapes and 3D objects
- Angle, symmetry and transformation.

Information handling

- Data and analysis
- Ideas of chance and uncertainty.

The mathematics framework as a whole includes a strong emphasis on the important part mathematics has played, and will continue to play, in the advancement of society, and the relevance it has for daily life.

A key feature of the mathematics framework is the development of algebraic thinking from an early stage. Research shows that the earlier algebraic thinking is introduced, the deeper the mathematical understanding will be and the greater the confidence in using mathematics.

Teachers will use the statements of experiences and outcomes in information handling to emphasise the interpretation of statistical information in the world around us and to emphasise the knowledge and skills required to take account of chance and uncertainty when making decisions.

The level of achievement at the Standard 4 level has been designed to approximate to that associated with SCQF level 4.

What are the features of effective learning and teaching in mathematics?

From the early stages onwards, children and young people should experience success in mathematics and develop the confidence to take risks, ask questions and explore alternative solutions without fear of being wrong. They will enjoy exploring and applying mathematical concepts to understand and solve problems, explaining their thinking and presenting their solutions to others in a variety of ways. At all stages, an emphasis on collaborative learning will encourage children to reason logically and creatively through discussion of mathematical ideas and concepts.

Through their use of effective questioning and discussion, teachers will use misconceptions and wrong answers as opportunities to improve and deepen children's understanding of mathematical concepts.

The experiences and outcomes encourage learning and teaching approaches that challenge and stimulate children and young people and promote their enjoyment of mathematics. To achieve this, teachers will use a skilful mix of approaches, including:

- planned active learning which provides opportunities to observe, explore, investigate, experiment, play, discuss and reflect
- modelling and scaffolding the development of mathematical thinking skills
- learning collaboratively and independently
- opportunities for discussion, communication and explanation of thinking
- developing mental agility
- using relevant contexts and experiences, familiar to young people
- making links across the curriculum to show how mathematical concepts are applied in a wide range of contexts, such as those provided by science and social studies
- using technology in appropriate and effective ways
- building on the principles of Assessment is for Learning, ensuring that young people understand the purpose and relevance of what they are learning
- developing problem-solving capabilities and critical thinking skills.

Mathematics is at its most powerful when the knowledge and understanding that have been developed are used to solve problems. Problem-solving will be at the heart of all our learning and teaching. We should regularly encourage children and young people to explore different options: 'what would happen if...?' is the fundamental question for teachers and learners to ask as mathematical thinking develops.

How will we ensure progression within and through levels?

As children and young people develop concepts within mathematics, these will need continual reinforcement and revisiting in order to maintain progression. Teachers can plan this development and progression through providing children and young people with more challenging contexts in which to use their skills. When the experience or outcome spans two levels within a line of development, this will be all the more important.

One case in point would be the third level outcome on displaying information. The expectation is that young people will continue to use and refine the skills developed at second level to display charts, graphs and diagrams. The contexts should ensure progression and there are clear opportunities to use other curriculum areas when extending young people's understanding.

What are broad features of assessment in mathematics?

(This section should be read alongside the advice for numeracy.)

Assessment in mathematics will focus on children and young people's abilities to work increasingly skilfully with numbers, data and mathematical concepts and processes and use them in a range of contexts. Teachers can gather evidence of progress as part of day-to-day learning about number, money and measurement, shape, position and movement and information handling. The use of specific assessment tasks will be important in assessing progress at key points of learning including transitions.

From the early years through to the senior stages, children and young people will demonstrate progress in their skills in interpreting and analysing information, simplifying and solving problems, assessing risk and making informed choices. They will also show evidence of progress through their skills in collaborating and working independently as they observe, explore, experiment with and investigate mathematical problems.

Approaches to assessment should identify the extent to which children and young people can apply their skills in their learning, in their daily lives and in preparing for the world of work. Progress will be seen as children and young people demonstrate their competence and confidence in applying mathematical concepts and skills. For example:

- Do they relish the challenge of number puzzles, patterns and relationships? Can they explain increasingly more abstract ideas of algebraic thinking?
- Can they successfully carry out mathematical processes and use their developing range of skills and attributes as set out in the experiences and outcomes? As they apply these to problems, can they draw on skills and concepts learned previously?
- As they tackle problems in unfamiliar contexts, can they confidently identify which skills and concepts are relevant to the problem? Can they then apply their skills accurately and then evaluate their solutions?
- Can they explain their thinking and demonstrate their understanding of 2D shapes and 3D objects?
- Can they evaluate data to make informed decisions?
- Are they developing the capacity to engage with and complete tasks and assignments?

Assessment should also link with other areas of the curriculum, within and outside the classroom, offering children and young people opportunities to develop and demonstrate their understanding of mathematics through social studies, technologies and science, and cultural and enterprise activities.

How can I make connections within and beyond mathematics?

Within mathematics there are rich opportunities for links among different concepts: a ready example is provided by investigations into area and perimeter which can involve estimation, patterns and relationships and a variety of numbers. When children and young people investigate number processes, there will be regular opportunities to develop mental strategies and mental agility. Teachers will make use of opportunities to develop algebraic thinking and introduce symbols, such as those opportunities afforded at early stages when reinforcing number bonds or later when investigating the sum of the angles in a triangle.

There are many opportunities to develop mathematical concepts in all other areas of the curriculum. Patterns and symmetry are fundamental to art and music; time, money and measure regularly occur in modern languages, home economics, design technology and various aspects of health and wellbeing; graphs and charts are regularly used in science and social studies; scale and proportion can be developed within social studies; formulae are used in areas including health and wellbeing, technologies and sciences; while shape, position and movement can be developed in all areas of the curriculum.

Numeracy and mathematics Experiences and outcomes

My learning in mathematics enables me to:

- develop a secure understanding of the concepts, principles and processes of mathematics and apply these in different contexts, including the world of work
- engage with more abstract mathematical concepts and develop important new kinds of thinking
- understand the application of mathematics, its impact on our society past and present, and its potential for the future
- develop essential numeracy skills which will allow me to participate fully in society
- establish firm foundations for further specialist learning
- understand that successful independent living requires financial awareness, effective money management, using schedules and other related skills
- interpret numerical information appropriately and use it to draw conclusions, assess risk, and make reasoned evaluations and informed decisions
- apply skills and understanding creatively and logically to solve problems, within a variety of contexts
- appreciate how the imaginative and effective use of technologies can enhance the development of skills and concepts.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Estimation and rounding	I am developing a sense of size and amount by observing, exploring, using and communicating with others about things in the world around me ¹ .	I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate.	I can use my knowledge of rounding to routinely estimate the answer to a problem then, after calculating, decide if my answer is reasonable, sharing my solution with others.	I can round a number using an appropriate degree of accuracy, having taken into account the context of the problem.	Having investigated the practical impact of inaccuracy and error, I can use my knowledge of tolerance when choosing th required degree of accuracy to make real-life calculations.

¹ The numeracy experiences and outcomes, which are the responsibility of all teachers, are shown in italics. Numeracy and mathematics: experiences and outcomes

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Number and number processes including addition, subtraction, multiplication, division and negative numbers	I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. I use practical materials and can 'count on and back' to help me to understand addition and subtraction, recording my ideas and solutions in different ways.	I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value. I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed.	I have extended the range of whole numbers I can work with and having explored how decimal fractions are constructed, can explain the link between a digit, its place and its value. Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others.	I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions.	Having recognised similarities between new problems and problems I have solved before, I can carry out the necessary calculations to solve problems set in unfamiliar contexts.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Number and number processes including addition, subtraction, multiplication, division and negative numbers (continued)			I have explored the contexts in which problems involving decimal fractions occur and can solve related problems using a variety of methods. Having explored the need for rules for the order of operations in number calculations, I can apply them correctly when solving simple problems.	<i>I can continue to recall number facts quickly and use them accurately when making calculations.</i>	I have investigated how introducing brackets to an expression can change the emphasis and can demonstrate my understanding by using the correct order of operations when carrying out calculations.
			I can show my understanding of how the number line extends to include numbers less than zero and have investigated how these numbers occur and are used.	I can use my understanding of numbers less than zero to solve simple problems in context.	

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Multiples, factors and primes			Having explored the patterns and relationships in multiplication and division, I can investigate and identify the multiples and factors of numbers.	I have investigated strategies for identifying common multiples and common factors, explaining my ideas to others, and can apply my understanding to solve related problems.	
				I can apply my understanding of factors to investigate and identify when a number is prime.	
Powers and roots				Having explored the notation and vocabulary associated with whole number powers and the advantages of writing numbers in this form, I can evaluate powers of whole numbers mentally or using technology.	I have developed my understanding of the relationship between powe and roots and can carry ou calculations mentally or usi technology to evaluate who number powers and roots, any appropriate number.
					Within real-life contexts, I c use scientific notation to express large or small numbers in a more efficient way and can understand ar work with numbers written this form.

Number, money	Number, money and measure (continued)							
	COC!	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Fractions, decimal fractions and percentages including ratio and proportion	I can share out a group of items by making smaller groups and can split a whole object into smaller parts.	 Having explored fractions by taking part in practical activities, I can show my understanding of: how a single item can be shared equally the notation and vocabulary associated with fractions where simple fractions lie on the number line. Through exploring how groups of items can be shared equally, I can find a fraction of an amount by applying my knowledge of division. Through taking part in practical activities including use of pictorial representations, I can demonstrate my understanding of simple fractions which are equivalent.	I have investigated the everyday contexts in which simple fractions, percentages or decimal fractions are used and can carry out the necessary calculations to solve related problems. I can show the equivalent forms of simple fractions, decimal fractions and percentages and can choose my preferred form when solving a problem, explaining my choice of method. I have investigated how a set of equivalent fractions can be created, understanding the meaning of simplest form, and can apply my knowledge to compare and order the most commonly used fractions.	 I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real-life situations. By applying my knowledge of equivalent fractions and common multiples, I can add and subtract commonly used fractions. Having used practical, pictorial and written methods to develop my understanding, I can convert between whole or mixed numbers and fractions. 	l can choose the most appropriate form of fractions, decimal fractions and percentages to use when making calculations mentally, in written form or using technology, then use my solutions to make comparisons, decisions and choices. I can solve problems involving fractions and mixed numbers in context, using addition, subtraction or multiplication.			

Number, money a	and measure (conti	inued)			
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Fractions, decimal fractions and percentages including ratio and proportion (continued)				I can show how quantities that are related can be increased or decreased proportionally and apply this to solve problems in everyday contexts.	Using proportion, I can calculate the change in one quantity caused by a change in a related quantity and solve real-life problems.
Money	I am developing my awareness of how money is used and can recognise and use a range of coins.	I can use money to pay for items and can work out how much change I should receive. I have investigated how different combinations of coins and notes can be used to pay for goods or be given in change.	I can manage money, compare costs from different retailers, and determine what I can afford to buy. I understand the costs, benefits and risks of using bank cards to purchase goods or obtain cash and realise that budgeting is important. I can use the terms profit and loss in buying and selling activities and can make simple calculations for this.	When considering how to spend my money, I can source, compare and contrast different contracts and services, discuss their advantages and disadvantages, and explain which offer best value to me. I can budget effectively, making use of technology and other methods, to manage money and plan for future expenses.	I can discuss and illustrate the facts I need to consider when determining what I can afford, in order to manage credit and debt and lead a responsible lifestyle. I can source information on earnings and deductions and use it when making calculations to determine net income. I can research, compare and contrast a range of personal finance products and, after making calculations, explain my preferred choices.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Time	I am aware of how routines and events in my world link with times and seasons, and have explored ways to record and display these using clocks, calendars and other methods.	I can tell the time using 12 hour clocks, realising there is a link with 24 hour notation, explain how it impacts on my daily routine and ensure that I am organised and ready for events throughout my day. I can use a calendar to plan and be organised for key events for myself and my class throughout the year. I have begun to develop a sense of how long tasks take by measuring the time taken to complete a range of activities using a variety of timers.	I can use and interpret electronic and paper-based timetables and schedules to plan events and activities, and make time calculations as part of my planning. I can carry out practical tasks and investigations involving timed events and can explain which unit of time would be most appropriate to use. Using simple time periods, I can give a good estimate of how long a journey should take, based on my knowledge of the link between time, speed and distance.	Using simple time periods, I can work out how long a journey will take, the speed travelled at or distance covered, using my knowledge of the link between time, speed and distance.	I can research, compare and contrast aspects of time and time management as they impact on me. I can use the link between time, speed and distance to carry out related calculations

Number, money and measure (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Measurement	I have experimented with everyday items as units of measure to investigate and compare sizes and amounts in my environment, sharing my findings with others.	I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. I can estimate the area of a shape by counting squares or other methods.	I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure. I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems. I can explain how different methods can be used to find the perimeter and area of a simple 2D shape or volume of a simple 3D object.	I can solve practical problems by applying my knowledge of measure, choosing the appropriate units and degree of accuracy for the task and using a formula to calculate area or volume when required. Having investigated different routes to a solution, I can find the area of compound 2D shapes and the volume of compound 3D objects, applying my knowledge to solve practical problems.	 I can apply my knowledge and understanding of measure to everyday problems and tasks and appreciate the practical importance of accuracy when making calculations. Through investigating real- life problems involving the surface area of simple 3D shapes, I can explore ways to make the most efficient use of materials and carry out the necessary calculations to solve related problems. I have explored with others the practicalities of the use of 3D objects in everyday life and can solve problems involving the volume of a prism, using a formula to make related calculations when required. 		

Number, money and measure (continued)								
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Mathematics – its impact on the world, past, present and future		I have discussed the important part that numbers play in the world and explored a variety of systems that have been used by civilisations throughout history to record numbers.	I have worked with others to explore, and present our findings on, how mathematics impacts on the world and the important part it has played in advances and inventions.	I have worked with others to research a famous mathematician and the work they are known for, or investigated a mathematical topic, and have prepared and delivered a short presentation.	I have discussed the importance of mathematics in the real world, investigated the mathematical skills required for different career paths and delivered, with others, a presentation on how mathematics can be applied in the workplace.			

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Patterns and relationships	I have spotted and explored patterns in my own and the wider environment and can copy and continue these and create my own patterns.	I can continue and devise more involved repeating patterns or designs, using a variety of media. Through exploring number patterns, I can recognise and continue simple number sequences and can explain the rule I have applied.	Having explored more complex number sequences, including well-known named number patterns, I can explain the rule used to generate the sequence, and apply it to extend the pattern.	Having explored number sequences, I can establish the set of numbers generated by a given rule and determine a rule for a given sequence, expressing it using appropriate notation.	 Having explored how real-life situations can be modelled by number patterns, I can establish a number sequence to represent a physical or pictorial pattern, determine a general formula to describe the sequence, then us it to make evaluations and solver related problems. I have discussed ways to describe the slope of a line, car interpret the definition of gradient and can use it to make relevant calculations, interpreting my answer for the context of the problem. Having investigated the pattern of the coordinate points lying or a horizontal or vertical line, I can describe the pattern using a simple equation. I can use a given formula to generate points lying on a straight line, plot them to create a graphical representation then use this to answer related questions.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Expressions and equations				I can collect like algebraic terms, simplify expressions and evaluate using substitution.	Having explored the distributive law in practical contexts, I can simplify, multiply and evaluate simpl algebraic terms involving a bracket.
					I can find the factors of algebraic terms, use my understanding to identify common factors and apply this to factorise expression
		I can compare, describe and show number relationships, using appropriate vocabulary and the symbols for equals, not equal to, less than and greater than.	I can apply my knowledge of number facts to solve problems where an unknown value is represented by a symbol or letter.	Having discussed ways to express problems or statements using mathematical language, I can construct, and use appropriate methods to solve, a range of simple equations.	Having discussed the benefits of using mathematics to model real life situations, I can constru and solve inequalities and extended range of equation
		When a picture or symbol is used to replace a number in a number statement, I can find its value using my knowledge of number facts and explain my thinking to others.		I can create and evaluate a simple formula representing information contained in a diagram, problem or statement.	

Shape, position	Shape, position and movement							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Properties of 2D shapes and 3D objects	I enjoy investigating objects and shapes and can sort, describe and be creative with them.	I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary. I can explore and discuss how and why different shapes fit together and create a tiling pattern with them.	Having explored a range of 3D objects and 2D shapes, I can use mathematical language to describe their properties, and through investigation can discuss where and why particular shapes are used in the environment. Through practical activities, I can show my understanding of the relationship between 3D objects and their nets. I can draw 2D shapes and make representations of 3D objects using an appropriate range of methods and efficient use of resources.	Having investigated a range of methods, I can accurately draw 2D shapes using appropriate mathematical instruments and methods.	I have explored the relationships that exist between the sides, or sides and angles, in right-angled triangles and can select and use an appropriate strategy to solve related problems, interpreting my answer for the context. Having investigated the relationships between the radius, diameter, circumference and area of a circle, I can apply my knowledge to solve related problems.			

Shape, position and movement (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Angle, symmetry and transformation	In movement, games, and using technology I can use simple directions and describe positions.	I can describe, follow and record routes and journeys using signs, words and angles associated with direction and turning.	I have investigated angles in the environment, and can discuss, describe and classify angles using appropriate mathematical vocabulary. I can accurately measure and draw angles using appropriate equipment, applying my skills to problems in context. Through practical activities which include the use of technology, I have developed my understanding of the link between compass points and angles and can describe, follow and record directions, routes and journeys using appropriate vocabulary. Having investigated where, why and how scale is used and expressed, I can apply my understanding to interpret simple models, maps and plans.	I can name angles and find their sizes using my knowledge of the properties of a range of 2D shapes and the angle properties associated with intersecting and parallel lines. Having investigated navigation in the world, I can apply my understanding of bearings and scale to interpret maps and plans and create accurate plans, and scale drawings of routes and journeys. I can apply my understanding of scale when enlarging or reducing pictures and shapes, using different methods, including technology.	Having investigated the relationship between a radius and a tangent and explored the size of the angle in a semi-circle, I can use the facts I have established to solve related problems. I can apply my understanding of the properties of similar figures to solve problems involving length and area.		

Shape, position	Shape, position and movement (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Angle, symmetry and transformation (continued)		I have developed an awareness of where grid reference systems are used in everyday contexts and can use them to locate and describe position.	describe the location of a point on a grid.		I can plot and describe the position of a point on a 4-quadrant coordinate grid. I can apply my understanding of the 4-quadrant coordinate system to move, and describe the transformation of, a point or shape on a grid.			
	I have had fun creating a range of symmetrical pictures and patterns using a range of media.	I have explored symmetry in my own and the wider environment and can create and recognise symmetrical pictures, patterns and shapes.	I can illustrate the lines of symr and apply my understanding to symmetrical pictures and patter		Having investigated patterns in the environment, I can use appropriate mathematical vocabulary to discuss the rotational properties of shapes, pictures and patterns and can apply my understanding when completing or creating designs.			

Information ha	Information handling							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Data and analysis		I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria.	Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading. I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way.	I can work collaboratively, making appropriate use of technology, to source information presented in a range of ways, interpret what it conveys and discuss whether I believe the information to be robust, vague or misleading. When analysing information or collecting data of my own, I can use my understanding of how bias may arise and how sample size can affect precision, to ensure that the data allows for fair conclusions to be drawn.	I can evaluate and interpret raw and graphical data using a variety of methods, comment on relationships I observe within the data and communicate my findings to others. In order to compare numerical information in real- life contexts, I can find the mean, median, mode and range of sets of numbers, decide which type of average is most appropriate to use and discuss how using an alternative type of average could be misleading.			
		Using technology and other methods, I can display data simply, clearly and accurately by creating tables, charts and diagrams, using simple labelling and scale.	I can display data in a clear wa choosing appropriately from ar charts, diagrams and graphs, r technology.	extended range of tables,	I can select appropriately from a wide range of tables, charts, diagrams and graphs when displaying discrete, continuous or grouped data, clearly communicating the significant features of the data.			

Information handling (continued)								
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Ideas of chance and uncertainty		I can use appropriate vocabulary to describe the likelihood of events occurring, using the knowledge and experiences of myself and others to guide me.	I can conduct simple experiments involving chance and communicate my predictions and findings using the vocabulary of probability.	I can find the probability of a simple event happening and explain why the consequences of the event, as well as its probability, should be considered when making choices.	By applying my understanding of probability, I can determine how many times I expect an event to occur, and use this information to make predictions, risk assessment informed choices and decisions.			

Appendix – Explanations

MNU 1-10a

Developing a child's understanding of 12 hour time in depth takes place through first level. Young learners will become familiar with 24 hour notation in their surroundings through TV listings, computers, cookers, DVD players and videos. They will naturally make links with 24 hour notation and the routines in their day. The next stage of development, the formal manipulation of 24 hour time, is included in MNU 2-10a – understanding and using timetables.

MNU 4-03a

The ability to apply and transfer familiar concepts to solve problems is fundamental for mathematical developments. As one example, young people will be familiar with the fact that 2.5 is a quarter of 10 and will know how to find 10% of a quantity. When asked to consider a less familiar calculation e.g. 2.5% of £840 the combination of these previously-acquired skills could lead them to suggest 1/4 of £84 to be a possible solution.

MNU 3-07a and MNU 4-07a

MNU 3-07a develops skills that allow learners to carry out calculations involving fractions, decimal fractions and percentages and then make decisions and choices. For example: which is the better buy, 3 for the price of 2 or a 30% discount?

MNU 4-07a develops the skills that allow learners to use their knowledge of interrelationships between fractions, decimal fractions and percentages to choose an elegant route to the solution. As an example, when asked to evaluate a discount of 12.5% on an item costing £800, an elegant solution would involve the understanding that 12.5% is 1/8, and that calculating 1/8 of £800 will provide the answer to the size of the discount.

MTH 3-11b

As this is a third level outcome, it is envisaged that the majority of shapes and objects will be formed from rectangles and triangles. However, for young people with well-developed understanding, problems involving circular properties could be introduced and investigated.

MNU 4-10a

Using time efficiently is necessary in the work place, in lifelong learning, leisure time and all other aspects of daily life. The ability to estimate how long different tasks take and then build a programme of sequential tasks is a critical numeracy skill which is fundamental to effective time management.

MNU 4-01a, MNU 4-11a

MNU 4-01a and MNU 4-11a are closely related. MNU 4-01a develops the concept of tolerance within estimating and rounding whereas MNU 4-11a is the practical application within measurement. The ability to work to the appropriate degree of accuracy is an essential numeracy skill. The degree of accuracy demanded varies of course according to the task. For example, the degrees of accuracy needed for measuring the dimensions of a room before buying a new carpet, measuring the opening when fitting a new door or machining a moving part within a combustion engine will be quite different. Or again, when a 4 metre length of wood is cut into 7 equal pieces, should each length be 0.57142 metres or will 0.57 metres be acceptable? The ability to handle spurious precision and report using an appropriate degree of accuracy should always be encouraged.

MTH 3-15a, MTH 3-15b and MTH 4-15a

- MTH 3-15a promotes the ability to form and solve simple equations from written statements and pictorial representation (as an example, think of a number, double it and add seven, the answer is 23. What is the original number?)
- MTH 3-15b promotes the ability to construct mathematical formulae from pictorial representations. A
 fundamental teaching point is that a formula has an output solution which will vary depending on the
 input number. A possible case could be a progression of diagrams where red tiles are surrounded by
 white tiles. When the patterns are analysed, the formula W = 2R + 6 is found to represent the pattern in
 each of the diagrams
- MTH 4-15a promotes the ability to form inequalities from written and pictorial information, then
 demonstrate an understanding that inequalities are solved through a set of appropriate numbers. It also
 promotes the ability to form and solve equations, using the ability to simplify through balancing.

MNU 4-20a

This experience and outcome relates to a learner's developing skills in interpreting a data set or the information contained in, for example, box plots, stem and leaf diagrams, line graphs, bar graphs, histograms and pie charts. Having considered this information it is important for learners to understand key features of these different ways of presenting information in order to be able to select appropriate forms and communicate findings to others.

MNU 4-22a

MNU 4-22a is intended to develop the link between simple probability and expected frequency. Having gained an understanding of these two concepts, the ability to assess the impact of a particular course of action based on risks and benefits is a very important skill for life.

curriculum for excellence: Social Studies

Social Studies: Religion

curriculum for excellence: Social Studies: Religion

Religious and moral education Experiences and outcomes

Learning through religious and moral education¹ enables me to:

- recognise religion as an important expression of human experience
- learn about and from the beliefs, values, practices and traditions of Christianity and the world religions selected for study, other traditions and viewpoints independent of religious belief
- explore and develop knowledge and understanding of religions, recognising the place of Christianity in the Scottish context
- investigate and understand the responses which religious and non-religious views can offer to questions about the nature and meaning of life
- recognise and understand religious diversity and the importance of religion in society
- develop respect for others and an understanding of beliefs and practices which are different from my own
- explore and establish values such as wisdom, justice, compassion and integrity and engage in the development of and reflection upon my own moral values
- develop my beliefs, attitudes, values and practices through reflection, discovery and critical evaluation
- develop the skills of reflection, discernment, critical thinking and deciding how to act when making moral decisions
- make a positive difference to the world by putting my beliefs and values into action
- establish a firm foundation for lifelong learning, further learning and adult life.

¹ Religious education has a statutory position in Scottish education, relating to schools but not to pre-school centres.

Religious and moral education: experiences and outcomes

World religions selected for study							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Beliefs	As I explore stories, images, music and poems, I am becoming familiar with the beliefs of the world religions I am learning about.	Through exploring stories from world religions, I can describe some of their key beliefs.	Through investigating and reflecting upon stories of world religions, I can show my understanding of these stories.	Having reflected upon sources from world religions, I can explain some key beliefs about deity, the human condition and the natural world, and how these beliefs lead to actions for followers of those religions.	Having considered the key beliefs of world religions, I can express reasoned views on these and discuss how putting them into practice might affect individuals and society. I can confidently support my own responses to these issues of belief.		
		By exploring some places and investigating artefacts, I am developing my knowledge of the beliefs of world religions and my awareness of their role in Scottish society and the world.	Through exploring the lives and teachings of significant figures from world religions, I am increasing my knowledge and understanding of their key beliefs.	Through investigating and reflecting upon how followers of world religions put their beliefs into action, I can reflect upon the consequences of putting my own beliefs into action.			
		I can talk about my own beliefs, or express them in other ways.	I can show understanding of the beliefs of world religions and explore the similarities and differences between these and my developing beliefs.	I can explain a range of beliefs which followers of world religions hold about 'ultimate questions' and participate in debates about these.	I can explain the contributions of the beliefs of world religions to the development of the world, now, and in the past		
				contributions of the beliefs of world religions to the development of the world, now and in the past.	world, now and in the past.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Values and issues	As I play and learn, I am developing my understanding of what is fair and unfair and the importance of caring for, sharing and cooperating with others.	Having explored stories from world religions, I can show my developing understanding of key values of those faiths and how they might be put into action in people's lives and communities.	Through investigating and reflecting upon the lives and teachings of significant figures from world religions, and drawing upon moral values as expressed in religious scriptures and other stories, I am beginning to understand how these have influenced the morality of world religions.	Through investigating and reflecting upon the responses of world religions to issues of morality, I can discuss ways in which to create a more just, equal, compassionate and tolerant society.	Through exploring a range of issues of morality, I can consider the responses of world religions to these issues and relate these to my own developing values.
		I can describe the key features of the values of world religions which are expressed in stories.	I can share my developing views about values such as fairness and equality and love, caring, sharing and human rights.	I can demonstrate my developing understanding of moral values through participating in events and projects which make a positive difference to others.	I can apply my developing understanding of morality to consider a range of moral dilemmas in order to find ways which could promote a more just and compassionate society.
				I can describe how the values of world religions contribute to as well as challenge Scottish and other societies.	I can explain how the values of world religions contribute to as well as challenge Scottish and other societies.

World religions selected for study (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Practices and traditions	I am becoming aware of the importance of celebrations, festivals and customs in religious people's lives.	I am discovering how followers of world religions demonstrate their beliefs through prayer/meditation, worship and special ceremonies. I am developing respect for the practices and traditions of others.	I am increasing my knowledge and understanding of different forms of worship and artefacts within world religions and can explain their importance for followers of world religions.	I have researched and reflected upon the major ceremonies and customs of world religions and can explain the significance of these to the followers of these religions.	Through researching a range of traditions, practices and customs of world religions, I can consider the place of these in contemporary life.		
		I am developing an awareness of the ways in which followers of world religions celebrate different times of year and can relate these to my own life and community.	Through investigating and reflecting upon the ways in which followers of world religions mark major life events and times of year, I can explain key features of such festivals and celebrations.				
			I can describe and reflect upon practices and traditions of world religions.	I am developing my understanding of Scotland's religious diversity as well as the place of religion in society.	I am able to reflect upon my own responses to the challenges and opportunities presented by Scotland's religious and cultural diversity and extend this reflection to the global context.		

Development of beliefs and values

These experiences and outcomes should be addressed through the context of the experiences and outcomes for Christianity and world religions selected for study. They should not be seen as a separate area to plan for but should be intertwined with the experiences and outcomes for Christianity and the world religions selected for study. They should also enable consideration of a range of spiritual traditions and viewpoints which are independent of religious belief.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4				
I am developing respect for others and my understanding of their beliefs and values.								
	I am developing an increasing awareness and understanding of my own beliefs and I put them into action in positive ways.							
As I play and learn, I am developing my understanding of what is fair and unfair and why caring and sharing are important.	I am developing an awareness that some people have beliefs and values which are independent of religion.	I am increasing my understanding of how people come to have their beliefs, and further developing my awareness that there is a diversity of belief in the modern world.	Through reflection and discussion, I can explain a range of beliefs which people hold and can participate in debates about 'ultimate questions'.	Having reflected upon and considered a range of beliefs, belief systems and moral viewpoints, I can express reasoned views on how putting these beliefs and values into action might lead to changes in society.				
		I am developing my understanding that people have beliefs and values based upon religious or other positions.	I am developing my own understanding of values such as honesty, respect and compassion and am able to identify how these values might be applied in relation to moral issues.	I am able to apply my understanding of a range of moral viewpoints, including those which are independent of religion, to specific moral issues and am aware of the diversity of moral viewpoints held in the wider world.				

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
	I can show my understanding of values such as caring, sharing, fairness, equality and love.	I can explain why different people think that values such as honesty, respect and compassion are important, and I show respect for others.	I can explain how the different beliefs that people have, including beliefs which are independent of religion, relate to their moral viewpoints and how this leads them to respond to moral issues.	I can explain my own responses to the benefits and challenges presented b the increasing diversity of belief to the wider world.
	I am becoming aware that people's beliefs and values affect their actions.	I am developing my understanding of how my own and other people's beliefs and values affect their actions.	I am developing my understanding of the nature of belief and morality.	I am able to offer a basic analysis of the origins and development of beliefs and morality.
				I can apply philosophical enquiry to explore question or ethical issues.

Other world religions

Scotland in the 21st century is an increasingly multicultural and diverse nation. The curriculum in a denominational school will reflect its particular faith perspective. In Roman Catholic schools it will build on the openness of Catholic schools to other young people regardless of denominations and faiths. In addition to developing their understanding of the Catholic faith, children and young people will also come to an appreciation of significant aspects of major world religions, recognising the sincere search for truth which takes place in other faiths. During the pre-school period and from experiences within their local community, most children will have learned something about other world religions, for example through festivals and celebrations, and teachers will want to build on that knowledge as they gradually introduce learning about other world religions. Other world religions would normally be taught from P3 onwards; however, where appropriate, this can be adapted to meet the needs of a diverse school community.

These outcomes can be met through a consideration of Judaism and Islam in the primary stages (although this can be adapted, where appropriate, to include some other world religions which exist in the school context). This can widen to learning about Buddhism, Sikhism and Hinduism in the secondary stages with Standard 4 level providing some study options in this regard.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Beliefs		I am aware that the Jewish and/or Muslim communities believe in God.	I have explored some beliefs of the Jewish and/or Muslim communities.	I can describe how a sense of the sacred affects the everyday living of people of various faiths. I can also describe how my understanding of this has influenced my respect for the faith of others.	I have researched into the origins of the key beliefs of different world faiths. I can describe and evaluate different beliefs about human nature and destiny, the problems of evil and suffering, and life after death. I can confidently express my own beliefs on these issues.

Other world religions (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Values and issues		I am aware of family and community values in the Jewish and/or Muslim faiths.	I can identify some of the principles by which people of the Jewish and/or Muslim faith communities live.	I have researched and I can describe the moral attitudes and values of the major world religions.	I have researched into and I can identify the core values at the heart of the major world faiths.		
				I can relate these to my own values.	I can describe how this has developed my awareness of the commonality of values across major world faiths. I can evaluate the importance these values hold for the good of the individual and stability of society.		
Practices and traditions		I can identify the places of worship of the Jewish and/or Muslim faith communities.	I can share some of the key features and rituals associated with the Jewish and/or Muslim communities' places of worship and their festivals.	I have researched the major ceremonies and customs of other world faiths. I can explain the significance of these to the followers of these beliefs.	Through researching the traditions, practices and customs of major world religions, I have developed my understanding of them and my respect for people of other faiths.		
		I know that the Jewish and/or Muslim communities have special books which are important to their beliefs.	I can identify some of the customs and artefacts related to the Jewish and/or Muslim communities and their festivals.	I have explored how people of other world faiths practise their beliefs today. I can relate these to my own faith practice.	I can describe the place of religious practice in Scotland and in the contemporary world at large.		

curriculum for excellence: sciences

Sciences Principles and practice

Science is an important part of our heritage and we use its applications every day in our lives at work, at leisure and in the home. Science and the application of science are central to our economic future and to our health and wellbeing as individuals and as a society. Children and young people are fascinated by new discoveries and technologies and become increasingly aware of, and passionate about, the impact of science on their own health and wellbeing, the health of society and the health of the environment.

Through learning in the sciences, children and young people develop their interest in, and understanding of, the living, material and physical world. They engage in a wide range of collaborative investigative tasks, which allows them to develop important skills to become creative, inventive and enterprising adults in a world where the skills and knowledge of the sciences are needed across all sectors of the economy.

What are the main purposes of learning in the sciences?

Children and young people participating in the experiences and outcomes in the sciences will:

- develop a curiosity and understanding of their environment and their place in the living, material and physical world
- demonstrate a secure knowledge and understanding of the big ideas and concepts of the sciences
- develop skills for learning, life and work
- develop skills of scientific inquiry and investigation using practical techniques
- develop skills in the accurate use of scientific language, formulae and equations
- · recognise the role of creativity and inventiveness in the development of the sciences
- apply safety measures and take necessary actions to control risk and hazards
- recognise the impact the sciences make on their lives, the lives of others, the environment and on society
- develop an understanding of the Earth's resources and the need for responsible use of them
- express opinions and make decisions on social, moral, ethical, economic and environmental issues based upon sound understanding
- develop as scientifically literate citizens with a lifelong interest in the sciences
- establish the foundation for more advanced learning and, for some, future careers in the sciences and the technologies.

What is the thinking behind the structure of the framework?

The sciences curriculum area within *Curriculum for Excellence* has to meet some significant challenges. While every child and young person needs to develop a secure understanding of important scientific concepts, their experience of the sciences in school must develop a lifelong interest in science and its applications.

Content has been updated and account has been taken of research evidence on learning in science and of international comparisons. As a result, there is a strong emphasis on the development of understanding and on critical evaluation, and expectations in some areas have been raised.

The key concepts have been clearly identified using five organisers:

- Planet Earth
- Forces, electricity and waves
- Biological systems
- Materials
- Topical science.

Further explanation of the rationale for each organiser is provided within the framework. Through these organisers, the framework provides a range of different contexts for learning which draw on important aspects of everyday life and work.

The experiences and outcomes tap into children's and young people's natural curiosity and their desire to create and work in practical ways. They can act as a motivation for progressively developing skills, knowledge, understanding and attitudes, and so maximise achievement.

The level of achievement at the Standard 4 level has been designed to approximate to that associated with SCQF level 4. As in other curriculum areas, the Standard 4 level experiences and outcomes provide possibilities for choice: it is not intended that any individual young person's programme of learning would include all of the Standard 4 level outcomes.

Schools and teachers will plan to offer different combinations of the experiences and outcomes to provide programmes that meet the needs of children and young people and provide a sound basis for more advanced study within the discrete sciences.

What learning and teaching approaches are useful in the sciences?

Although the content of the curriculum is important, the high aspirations of the sciences curriculum within *Curriculum for Excellence* will only be achieved through high quality learning and teaching. The sciences experiences and outcomes are designed to stimulate the interest and motivation of children and young people and to support staff in planning challenging, engaging and enjoyable learning and teaching activities. They allow flexibility and choice for both teachers and learners to meet individual learning needs.

Effective learning and teaching approaches extend experiential learning from the early years into primary school and beyond. As children and young people progress in their learning of the sciences, teachers can take advantage of opportunities for study in the local, natural and built environments, as an opportunity to deepen their knowledge and understanding of the big ideas of the sciences. Teaching and learning approaches should promote thinking as well as provide opportunities to consolidate and apply learning.

In the sciences, effective learning and teaching depends upon the skilful use of varied approaches, including:

- active learning and planned, purposeful play
- · development of problem-solving skills and analytical thinking skills
- development of scientific practical investigation and inquiry
- use of relevant contexts, familiar to young people's experiences
- appropriate and effective use of technology, real materials and living things
- building on the principles of Assessment is for Learning
- collaborative learning and independent thinking
- emphasis on children explaining their understanding of concepts, informed discussion and communication.

Through involvement in a wide range of open-ended experiences, challenges and investigations, including those related to the applications of science in areas such as engineering, medicine and forensics, children and young people develop skills of critical thinking and appreciate the key role of the scientific process both in generating new knowledge and in applying this to addressing the needs of society.

What skills are developed in the sciences?

The experiences and outcomes in science provide opportunities for children and young people to develop and practise a range of inquiry and investigative skills, scientific analytical thinking skills, and develop attitudes and attributes of a scientifically literate citizen; they also support the development of a range of skills for life and skills for work, including literacy, numeracy and skills in information and communications technology (ICT).

These skills are embedded in the contexts detailed in the experiences and outcomes. The progressive development of these skills throughout the levels is supported through the increasing complexity of the scientific contexts and concepts being developed and through revisiting and reinforcing the skills. The experiences and outcomes support the development of the attributes and capabilities of the four capacities of *Curriculum for Excellence* by encouraging teachers to consider the purposes of learning and to plan for active learning.

The skills detailed below draw on research from other countries and on the signposts to the four capacities detailed in the HMIE 2008 publication *Science – A portrait of current practice in Scottish schools*.

Inquiry and investigative skills

Through experimenting and carrying out practical scientific investigations and other research to solve problems and challenges, children and young people:

- ask questions or hypothesise
- plan and design procedures and experiments
- select appropriate samples, equipment and other resources
- carry out experiments
- use practical analytical techniques
- observe, collect, measure and record evidence, taking account of safety and controlling risk and hazards
- present, analyse and interpret data to draw conclusions
- review and evaluate results to identify limitations and improvements
- present and report on findings.

The main approaches to science inquiry are:

- observing and exploring careful observation of how something behaves, looking for changes over time and exploring 'what happens if...?' and 'how could I...?' questions
- classifying through identifying key characteristics
- fair testing through identifying all possible variables and then changing only one while controlling all others
- finding an association linking two variables to determine relationships.

Scientific analytical thinking skills

Children and young people develop a range of analytical thinking skills in order to make sense of scientific evidence and concepts. This involves them:

- being open to new ideas and linking and applying learning
- thinking creatively and critically
- developing skills of reasoning to provide explanations and evaluations supported by evidence or justifications
- making predictions, generalisations and deductions
- drawing conclusions based on reliable scientific evidence.

How can I plan for progression in the skills of scientific investigations, inquiry and analytical thinking?

Throughout the framework, these investigation and cognitive skills are signalled within the experiences and outcomes across all levels. The skills become more complex as learners' conceptual understanding develops within increasingly complex science contexts.

Teachers can plan to focus on the development of specific skills through investigations, inquiries or challenges, with occasional opportunities for more detailed and comprehensive activities, recognising that any one investigation does not always require children and young people to develop the full range of skills.

A broad indication of expectations for the development of these skills at second level and at third/fourth level may be helpful.

Second level

Children take part in a range of scientific investigations and inquiries which develop their understanding of the underlying scientific concepts appropriate for second level. They develop a growing awareness of themselves and the world around them through observation, collecting specimens and carrying out experiments. They develop their ability to formulate questions or predictions based on observations or information that can be answered through experimentation, inquiry and research. As they answer these questions, they show an increasing awareness of the factors that could be changed and can plan a 'fair test' that involves keeping all the factors the same except one.

While conducting experiments, children are able to safely use simple tools, equipment, apparatus and procedures. They make observations, collect information and make measurements accurately using relevant devices and standard units and ICT where appropriate. They can select, with assistance, appropriate methods to record their findings.

Learners at this level use simple charts and diagrams to present, analyse and interpret their findings, identifying simple relationships, making links to their original questions or predictions and drawing conclusions consistent with findings. They can present their findings in writing, orally or visually using a variety of media.

Third and fourth level

Young people take part in a range of scientific investigations and inquiries which develop their understanding of the underlying scientific concepts appropriate for third and fourth levels. They will take a more quantitative and formalised approach to investigations and inquiries. As learners plan and design their investigations, they identify a number of key questions, formulating hypotheses and predictions based on observation or their knowledge. They control and vary an increased number of more complex variables.

Learners become more evaluative and increasingly take the initiative in decision making about samples, measurements, equipment and procedures to use. They demonstrate increased precision in their use of terminology, units and scales. They apply safety measures and take the necessary action to control risk and hazards. They collect and analyse increasingly complex data and information including using data loggers and software analysis tools.

Young people establish links between their findings and the original question, hypothesis or prediction. They establish relationships between variables and use a relationship, equation or formulae to find a qualitative or quantitative solution. They evaluate a range of aspects of their investigation or inquiry including the relevance and reliability of the evidence.

Young people provide explanations of their findings based on evidence in terms of cause and effect and by applying their understanding of the underlying scientific concepts. They begin to consider alternative explanations and apply or extend conclusions to new situations or identify further studies. They communicate effectively in a range of ways including orally and through scientific report writing.

How does the science curriculum support development of the skills and attributes of scientifically literate citizens?

Children and young people develop as scientifically literate citizens with a lifelong interest in science by:

- developing scientific values and respect for living things and the environment
- assessing risk and benefit of science applications
- making informed personal decisions and choices
- expressing opinions and showing respect for others' views
- developing informed social, moral and ethical views of scientific, economic and environmental issues
- developing self-awareness through reflecting on the impact, significance and cultural importance of science and its applications to society
- demonstrating honesty in collecting and presenting scientific information/data and showing respect for evidence
- being able to read and understand essential points from sources of information including media reports
- discussing and debating scientific ideas and issues
- reflecting critically on information included or omitted from sources/reports including consideration of limitations of data.

The experiences and outcomes clearly indicate opportunities for developing these skills and attributes.

What are broad features of assessment in sciences?

Assessment in the sciences will focus on children and young people's knowledge and understanding of key scientific concepts in the living, material and physical world, inquiry and investigative skills, scientific analytical and thinking skills, scientific literacy and general attributes. Teachers can gather evidence of progress as part of day-to-day learning, and specific assessment tasks will also be important in assessing progress at key points of learning.

From the early years through to the senior stages, children and young people will demonstrate progress through their skills in planning and carrying out practical investigations, inquiries and challenges, working individually and collaboratively, and describing and explaining their understanding of scientific ideas and concepts. They will also demonstrate evidence of progress through their abilities and skills in reasoning, presenting and evaluating their findings through debate and discussion, expressing informed opinions and making decisions on social, moral, ethical, economic and environmental issues.

Approaches to assessment should identify the extent to which children and young people can apply these skills in their learning and their daily lives and in preparing for the world of work. For example:

- How well do they contribute to investigations and experiments?
- Are they developing the capacity to engage with and complete tasks and assignments?
- To what extent do they recognise the impact the sciences make on their lives, on the lives of others, on the environment and on society?

Progression in knowledge and understanding can be demonstrated, for example, through children and young people:

- providing more detailed descriptions and explanations of increasingly complex scientific contexts and concepts
- using a wider range of scientific language, formulae and equations
- presenting, analysing and interpreting more complex evidence to draw conclusions and make sense of scientific ideas.

They will demonstrate their progress through investigations, inquiries and challenges, and through how well they apply scientific skills in increasingly complex learning situations. For example, investigations and inquiries will

become more evaluative, deal with an increasing range and complexity of variables, and involve collecting and analysing increasingly complex information.

Through developing these skills, children and young people will demonstrate growing confidence and enjoyment of the sciences. Assessment should also link with other areas of the curriculum, within and outside the classroom, to allow children and young people to demonstrate their increasing awareness of the impact of scientific developments on their own health and wellbeing, society and the environment.

How can I make connections within and beyond the sciences?

The sciences experiences and outcomes encourage links between the sciences and with other curriculum areas in order to foster deeper, more enjoyable and active learning. Experiences and outcomes relating to Earth science are located in both the social studies and the sciences frameworks and therefore offer an excellent vehicle for interdisciplinary working. Links exist between, and across, the sciences and other areas of the curriculum: for example, engineering offers possible links among the sciences, mathematics and the technologies. Such practice provides children and young people with opportunities to recognise the connectivity which exists across curriculum areas as a means of understanding the world around them.

All science teachers will look for opportunities both to develop and reinforce science knowledge and skills within their teaching activities and to work with their colleagues in other areas to plan interdisciplinary studies and a coherent approach to the development of literacy and numeracy skills, aspects of health and wellbeing and ICT.

Through self-evaluation, schools and departments will plan for an appropriate balance of learning and teaching approaches, progression in skills, and effective use of interdisciplinary work to deepen and extend learning.

Sciences Experiences and outcomes

The sciences framework provides a range of different contexts for learning which draw on important aspects of everyday life and work.

Learning in the sciences will enable me to:

- develop curiosity and understanding of the environment and my place in the living, material and physical world
- demonstrate a secure knowledge and understanding of the big ideas and concepts of the sciences
- develop skills for learning, life and work
- develop the skills of scientific inquiry and investigation using practical techniques
- develop skills in the accurate use of scientific language, formulae and equations
- apply safety measures and take necessary actions to control risk and hazards
- recognise the impact the sciences make on my life, the lives of others, the environment and on society
- recognise the role of creativity and inventiveness in the development of the sciences
- develop an understanding of the Earth's resources and the need for responsible use of them
- express opinions and make decisions on social, moral, ethical, economic and environmental issues based upon sound understanding
- develop as a scientifically-literate citizen with a lifelong interest in the sciences
- establish the foundation for more advanced learning and future careers in the sciences and the technologies.

Planet Earth						
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Biodiversity and interdependence Learners explore the rich and changing diversity of living things and develop their understanding of how organisms are interrelated at local and global levels. By exploring interactions and energy flow between plants and animals (including humans) learners develop their understanding of how species depend on one another and on the environment for survival. Learners investigate the factors affecting plant growth and develop their understanding of the positive and negative impact of the human population on the environment.	I have observed living things in the environment over time and am becoming aware of how they depend on each other.	I can distinguish between living and non living things. I can sort living things into groups and explain my decisions.	I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction.	I can sample and identify living things from different habitats to compare their biodiversity and can suggest reasons for their distribution.	I understand how animal and plant species depend on each other and how living things are adapted for survival. I can predict the impact of population growth and natural hazards on biodiversity.	
		I can explore examples of food chains and show an appreciation of how animals and plants depend on each other for food.	I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs. I have contributed to the design or conservation of a wildlife area.	I have collaborated on investigations into the process of photosynthesis and I can demonstrate my understanding of why plants are vital to sustaining life on Earth.	I have propagated and grown plants using a variety of different methods. I can compare these methods and develop my understanding of their commercial use.	
			Through carrying out practical activities and investigations, I can show how plants have benefited society.		I can contribute to the design of an investigation to show the effects of different factors on the rate of aerobic respiration and explain my findings.	

Planet Earth (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Biodiversity and interdependence (continued)	I have helped to grow plants and can name their basic parts. I can talk about how they grow and what I need to do to look after them.	I can help to design experiments to find out what plants need in order to grow and develop. I can observe and record my findings and from what I have learned I can grow healthy plants in school.	I have collaborated in the design of an investigation into the effects of fertilisers on the growth of plants. I can express an informed view of the risks and benefits of their use.	Through investigations and based on experimental evidence, I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world's food production.	Through investigating the nitrogen cycle and evaluating results from practical experiments, I can suggest a design for a fertiliser, taking account of its environmental impact.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Energy sources and sustainability Learners explore types, sources and uses of energy and develop their understanding of how energy is transferred and conserved. They consider the relevance of these concepts to everyday life. They explore the nature and sustainability of energy sources and discuss benefits and assess possible risks to form an informed view of responsible energy use.	I have experienced, used and described a wide range of toys and common appliances. I can say 'what makes it go' and say what they do when they work.	I am aware of different types of energy around me and can show their importance to everyday life and my survival.	By considering examples where energy is conserved, I can identify the energy source, how it is transferred and ways of reducing wasted energy.	I can use my knowledge of the different ways in which heat is transferred between hot and cold objects and the thermal conductivity of materials to improve energy efficiency in buildings or other systems.	By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risk and benefits of different energy sources, including those produced from plants.
			Through exploring non- renewable energy sources, I can describe how they are used in the world today and express an informed view on the implications for their future use.	By investigating renewable energy sources and taking part in practical activities to harness them, I can discuss their benefits and potential problems.	Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources.
			I can investigate the use and development of renewable and sustainable energy to gain an awareness of their growing importance in the world or beyond.		

Planet Earth (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Processes of the planet Learners explore the changing states of matter and the physical and chemical processes which influence Earth's atmosphere and oceans. They learn about climate change as a natural process in time as well as the result of human activity. Through connections with collaborative studies of landscape, weather and climate in social studies they build up an integrated picture of the dynamic nature of Earth.	By investigating how wa form to another, I can re everyday experiences.	ater can change from one elate my findings to	I can apply my knowledge of how water changes state to help me understand the processes involved in the water cycle in nature over time.	By contributing to experiments and investigations, I can develop my understanding of models of matter and can apply this to changes of state and the energy involved as they occur in nature. I can explain some of the processes which contribute to climate change and discuss the possible impact of atmospheric change on the survival of living things.	I have developed my understanding of the kinetic model of a gas. I can describe the qualitative relationships between pressure, volume and temperature of gases. Through exploring the carbon cycle, I can describe the processes involved in maintaining the balance of gases in the air, considering causes and implications of changes in the balance.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Space Learners develop their understanding of the Earth's position within the universe while developing a sense of time and scale. They develop their understanding of how our knowledge of the universe has changed over time and explore ideas of future space exploration and the likelihood of life beyond planet Earth.	I have experienced the wonder of looking at the vastness of the sky, and can recognise the sun, moon and stars and link them to daily patterns of life.	By safely observing and recording the sun and moon at various times, I can describe their patterns of movement and changes over time. I can relate these to the length of a day, a month and a year.	By observing and researching features of our solar system, I can use simple models to communicate my understanding of size, scale, time and relative motion within it.	By using my knowledge of our solar system and the basic needs of living things, I can produce a reasoned argument on the likelihood of life existing elsewhere in the universe.	By researching developments used to observe or explore space, I can illustrate how our knowledge of the universe has evolved over time.

Forces, electricit	y and waves				
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Forces Learners first develop an understanding of how forces can change the shape or motion of an object, considering both forces in contact with objects and those which act over a distance. They investigate the effects of friction on motion and explore ways of improving efficiency in moving objects and systems. Study of speed and acceleration	Through everyday experiences and play with a variety of toys and other objects, I can recognise simple types of forces and describe their effects.	By investigating forces on toys and other objects, I can predict the effect on the shape or motion of objects.	By investigating how friction, including air resistance, affects motion, I can suggest ways to improve efficiency in moving objects.	By contributing to investigations of energy loss due to friction, I can suggest ways of improving the efficiency of moving systems.	I can use appropriate methods to measure, calculate and display graphically the speed of an object, and show how these methods can be used in a selected application. By making accurate measurements of speed and acceleration, I can relate the motion of an object to the forces acting on it and apply this knowledge to transport safety.
of an object leads to an understanding of the relationship between its motion and the forces acting on it. This is linked to transport safety. Learners develop their understanding of the concept of buoyancy force and density.		By exploring the forces exerted by magnets on other magnets and magnetic materials, I can contribute to the design of a game.	I have collaborated in investigations to compare magnetic, electrostatic and gravitational forces and have explored their practical applications.	I have collaborated in investigations into the effects of gravity on objects and I can predict what might happen to their weight in different situations on Earth and in space.	I can help to design and carry out investigations into the strength of magnets and electromagnets. From investigations, I can compare the properties, uses and commercial applications of electromagnets and supermagnets.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Forces (continued)			By investigating floating and sinking of objects in water, I can apply my understanding of buoyancy to solve a practical challenge.		Through experimentation, I can explain floating and sinking in terms of the relative densities of different materials.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Electricity The learner's knowledge about electricity begins with knowing how to use it safely and this aspect is reinforced throughout their learning. They develop their understanding of electricity as a means of transferring energy by investigating circuits and building chemical cells. Learners develop their understanding of series and parallel circuits and of electrical and electronic components and apply their knowledge to the process of designing, constructing, testing and modifying.	I know how to stay safe when using electricity. I have helped to make a display to show the importance of electricity in our daily lives.	I can describe an electrical circuit as a continuous loop of conducting materials. I can combine simple components in a series circuit to make a game or model.	I have used a range of electrical components to help to make a variety of circuits for differing purposes. I can represent my circuit using symbols and describe the transfer of energy around the circuit.	Having measured the current and voltage in series and parallel circuits, I can design a circuit to show the advantages of parallel circuits in an everyday application.	Through investigation, I understand the relationship between current, voltage and resistance. I can apply this knowledge to solve practical problems. By contributing to investigations into the properties of a range of electronic components, I can select and use them as input and output devices in practical electronic circuits. Using my knowledge of electronic components and switching devices, I can help to engineer an electronic system to provide a practical solution to a real-life situation.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Electricity (continued)			To begin to understand how batteries work, I can help to build simple chemical cells using readily-available materials which can be used to make an appliance work.	I can help to design simple chemical cells and use them to investigate the factors which affect the voltage produced.	Using experimental evidence, I can place metal in an electrochemical series and can use this information to make predictions about their use in chemical cells.
					Using a variety of sources, have explored the latest developments in chemical cells technology and can evaluate their impact on society.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Vibrations and waves Learners explore the nature of sound, light and radiations in the electromagnetic spectrum. They use musical instruments to explore the relationship between vibrations and sounds produced. They develop their understanding of the properties of light and other forms of	Through play, I have explored a variety of ways of making sounds.	By collaborating in experiments on different ways of producing sound from vibrations, I can demonstrate how to change the pitch of the sound.	Through research on how animals communicate, I can explain how sound vibrations are carried by waves through air, water and other media. By exploring reflections, the formation of shadows and the mixing of coloured lights, I can use my knowledge of the properties of light to show how it can be used in a	By exploring the refraction of light when passed through different materials, lenses and prisms, I can explain how light can be used in a variety of applications.	By recording and analysing sound signals, I can describe how they can be manipulated and used in sound engineering. By carrying out a comparison of the properties of parts of the electromagnetic spectrum beyond the visible, I can explain the use of radiation and discuss how this has
electromagnetic radiations. They explore how different waves relate to the environment and how we make use of them in health, medicine and communications.			creative way.	By exploring radiations beyond the visible, I can describe a selected application, discussing the advantages and limitations.	impacted upon society and our quality of life.

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Body systems and cells Learners develop their knowledge and understanding of the structure and function of organs of the body, including the senses.	I am aware of my growing body and I am learning the correct names for its different parts and how they work.	By researching, I can describe the position and function of the skeleton and major organs of the human body and discuss what I need to do to keep them healthy.	By investigating some body systems and potential problems which they may develop, I can make informed decisions to help me to maintain my health and wellbeing.	I have explored the structure and function of organs and organ systems and can relate this to the basic biological processes required to sustain life.	I can explain how biological actions which take place in response to external and internal changes work to maintain stable body conditions.
They learn about cells as the basic units of life, and their organisation to form familiar body systems. Through observation, research and practical investigation learners explore the risk and	I can identify my senses and use them to explore the world around me.	I have explored my senses and can discuss their reliability and limitations in responding to the environment.	I have explored the structure and function of sensory organs to develop my understanding of body actions in response to outside conditions.	I have explored the role of technology in monitoring health and improving the quality of life.	Through investigation, I can explain how changes in learned behaviour due to internal and external stimuli are of benefit to the survival of species.
impact of microorganisms in relation to health, and then in industrial processes. They experience the use of technology in monitoring health and improving the quality of life and develop informed views on the moral and ethical implications of controversial biological procedures.		I know the symptoms of some common diseases caused by germs. I can explain how they are spread and discuss how some methods of preventing and treating disease benefit society.	I have contributed to investigations into the role of microorganisms in producing and breaking down some materials.	Using a microscope, I have developed my understanding of the structure and variety of cells and of their functions. I have contributed to investigations into the different types of microorganisms and can explain how their growth can be controlled.	By researching cell division, I can explain its role in growth and repair and can discuss how some cells can be used therapeutically. I have taken part in practical activities which involve the use of enzymes and microorganisms to develop my understanding of their properties and their use in industries.

Biological systems (continued)							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Body systems and cells (continued)				I have explored how the body defends itself against disease and can describe how vaccines can provide protection.	I can debate the moral and ethical issues associated with some controversial biological procedures.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Inheritance Starting with observations of similarities and differences between individuals, learners develop their understanding of how organisms develop and pass on genetic information to the next generation. They begin to develop their knowledge of genetics and of the role of DNA and examine moral and ethical questions which arise from technological developments.	I recognise that we have similarities and differences but are all unique.	By comparing generations of families of humans, plants and animals, I can begin to understand how characteristics are inherited.	By investigating the lifecycles of plants and animals, I can recognise the different stages of their development. By exploring the characteristics offspring inherit when living things reproduce, I can distinguish between inherited and non- inherited characteristics.	I understand the processes of fertilisation and embryonic development and can discuss possible risks to the embryo. I have extracted DNA and understand its function. I can express an informed view of the risks and benefits of DNA profiling.	Through investigation, I can compare and contrast how different organisms grow and develop. Through evaluation of a range of data, I can compare sexual and asexual reproduction and explain their importance for survival of species. I can use my understanding of how characteristics are inherited to solve simple genetic problems and relate this to my understanding of DNA, genes and chromosomes.

Materials							
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4		
Properties and uses of substances By exploring the properties of different substances and how they can be changed, learners gradually develop their understanding of the connection between structure and properties. They explore the development of new substances which have useful properties, and	Through creative play, I explore different materials and can share my reasoning for selecting materials for different purposes.	Through exploring properties and sources of materials, I can choose appropriate materials to solve practical challenges.	By contributing to investigations into familiar changes in substances to produce other substances, I can describe how their characteristics have changed.	I have developed my knowledge of the Periodic Table by considering the properties and uses of a variety of elements relative to their positions. Having contributed to a variety of practical activities to make and break down compounds, I can describe examples of how the properties of compounds are different from their constituent elements.	Through gaining an understanding of the structure of atoms and how they join, I can begin to connect the properties of substances with their possible structures.		
begin to relate physical and chemical properties to models of atomic structure. Learners begin to use symbols and chemical formulae as a way of communicating information about elements and compounds.		I can make and test predictions about solids dissolving in water and can relate my findings to the world around me.	I have participated in practical activities to separate simple mixtures of substances and can relate my findings to my everyday experience.	I can differentiate between pure substances and mixtures in common use and can select appropriate physical methods for separating mixtures into their components.	I have carried out research into novel materials and car begin to explain the scientif basis of their properties and discuss the possible impact they may have on society.		

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Properties and uses of substances (continued)			By investigating common conditions that increase the amount of substance that will dissolve or the speed of dissolving, I can relate my findings to the world around me.	I have taken part in practical investigations into solubility using different solvents and can apply what I have learned to solve everyday practical problems.	Through evaluation of experimental results, I can demonstrate my understanding of conservation of mass.

Materials (continued)								
	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4			
Earth's materials Learners develop their knowledge and understanding of substances that make up the Earth's surface. Properties, uses and methods of extraction of such materials are explored. Opportunities exist to discuss the importance of carbon compounds derived from crude oil to our lives.		Throughout all my learning, I take appropriate action to ensure conservation of materials and resources, considering the impact of my actions on the environment.	Having explored the substances that make up Earth's surface, I can compare some of their characteristics and uses.	Through evaluation of a range of data, I can describe the formation, characteristics and uses of soils, minerals and basic types of rocks. I can participate in practical activities to extract useful substances from natural resources.	I have explored how different materials can be derived from crude oil and their uses. I can explain the importance of carbon compounds in our lives.			

	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Chemical changes Learners gradually develop an understanding of chemical changes. They consider processes which take place in the environment and in the laboratory, and develop their understanding of			I have investigated different water samples from the environment and explored methods that can be used to clean and conserve water and I am aware of the properties and uses of water.	Having taken part in practical activities to compare the properties of acids and bases, I have demonstrated ways of measuring and adjusting pH and can describe the significance of pH in everyday life.	I can monitor the environment by collecting and analysing samples. I can interpret the results to inform others about levels of pollution and express a considered opinion on how science can help to protect our environment.
the environmental impact of some changes. They develop their understanding of energy changes in chemical reactions and some of the factors affecting the rates of reactions. Learners develop the use of chemical names, formulae and equations as a way of conveying			I have collaborated in activities which safely demonstrate simple chemical reactions using everyday chemicals. I can show an appreciation of a chemical reaction as being a change in which different materials are made.	Through experimentation, I can identify indicators of chemical reactions having occurred. I can describe ways of controlling the rate of reactions and can relate my findings to the world around me.	I can collect and analyse experimental data on chemical reactions that resu in an obvious change in energy. I can apply my findings to explain the significance of the energy changes associated with chemical reactions. Having carried out a range of experiments using different
nformation about chemical changes.				to develop my understanding of chemical reactions involving the Earth's materials. I can explain how we apply knowledge of these reactions in practical ways.	chemicals, I can place meta in an order of reactivity, and relate my findings to their everyday uses.

	Early	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Topical science By considering current issues of science, learners increasingly develop their understanding of scientific concepts and their capacity to form			Through research and discussion I have an appreciation of the contribution that individuals are making to scientific discovery and invention and the impact this has made on society.	I have collaborated with others to find and present information on how scientists from the world have contributed to innovative research and development.	I have researched new developments in science an can explain how their currer or future applications might impact on modern life.
informed social, moral and ethical views. They reflect upon and critically evaluate media portrayal of scientific findings.	I can talk about science stories to develop my understanding of science and the world around me.	I have contributed to discussions of current scientific news items to help develop my awareness of science.	I can report and comment on current scientific news items to develop my knowledge and understanding of topical science.	Through research and discussion, I have contributed to evaluations of media items with regard to scientific content and ethical implications.	Having selected scientific themes of topical interest, I can critically analyse the issues, and use relevant information to develop an informed argument.

curriculum for excellence: social studies

Social studies Principles and practice

What will learning in social studies enable children and young people to do?

Through social studies, children and young people develop their understanding of the world by learning about other people and their values, in different times, places and circumstances; they also develop their understanding of their environment and of how it has been shaped. As they mature, children and young people's experiences will be broadened using Scottish, British, European and wider contexts for learning, while maintaining a focus on the historical, social, geographic, economic and political changes that have shaped the world. Children and young people learn about human achievements and about how to make sense of changes in society, of conflicts and of environmental issues. With greater understanding comes the opportunity and ability to influence events by exercising informed and responsible citizenship.

Children and young people as they participate in experiences and outcomes in social studies will:

- develop their understanding of the history, heritage and culture and an appreciation of the local and national heritage within the world
- broaden their understanding of the world by learning about human activities and achievements in the past and present
- develop their understanding of their own values, beliefs and cultures and those of others
- develop an understanding of the principles of democracy and citizenship through experience of critical and independent thinking
- explore and evaluate different types of sources and evidence
- learn how to locate, explore and link periods, people and events in time and place
- learn how to locate, explore and link features and places locally and further afield
- engage in activities which encourage enterprising attitudes
- develop an understanding of concepts that encourage enterprise and influence business
- establish firm foundations for lifelong learning and for further specialised study and careers.

How are the social studies experiences and outcomes organised?

The social studies experiences and outcomes have been structured under the three main organisers:

- people, past events and societies
- people, place and environment
- people in society, economy and business.

These organisers recognise the special contribution made by each of the social subjects, whilst enabling them to reflect local contexts. Teachers will use this framework to provide children and young people with opportunities for effective interdisciplinary working by making connections across and between subject boundaries. Teachers should not feel constrained by the organisers and should explore the opportunities to plan within and across curriculum areas as outlined below to enhance learning. The organisers will assist with the collaborative planning of coherent programmes of learning within and between establishments.

The Standard 4 level provides a range of experiences and outcomes within which there can be choice and scope for depth, challenge, enjoyment and personalisation. Schools and their partners will consider how they can offer and plan different combinations of the experiences and outcomes to provide a sound basis for more advanced study. The level of achievement at the Standard 4 level has been designed to approximate to that associated with SCQF level 4.

What learning and teaching approaches can I use in social studies?

Although the content of the curriculum is important, our aspirations can only be achieved through high quality learning and teaching. The social studies experiences and outcomes will support staff in planning challenging, engaging and enjoyable learning and teaching activities which will stimulate the interest and motivation of children and young people. They allow flexibility and choice for both teachers and learners which can sustain interest and enthusiasm.

In social studies, effective learning and teaching will draw upon a variety of approaches including:

- active learning which provides opportunities to observe, explore, experiment and play
- · use of relevant contexts and experiences familiar to children and young people
- appropriate and effective use of technology
- building on the principles of Assessment is for Learning
- both collaborative and independent learning
- discussion and informed debate
- interdisciplinary learning experiences
- learning outdoors, field trips, visits and input by external contributors.

How are skills developed in social studies?

The development of skills is an essential aspect of learning in social studies and the experiences and outcomes provide frequent opportunities for applying these skills in new and more complex contexts. Terms such as 'investigating', 'exploring', 'discussing' and 'presenting' are used throughout the experiences and outcomes from early to Standard 4 level, recognising that at all stages learners are capable of exercising these skills at a level appropriate to their development. The framework ensures that social studies provide an important context for the development of literacy and numeracy skills.

Children and young people as they learn within the social studies will develop a range of skills including:

- observing, describing and recording
- comparing and contrasting to draw valid conclusions
- exploring and evaluating different types of sources and evidence
- · development of curiosity and problem-solving skills and capacity to take initiatives
- interacting with others and developing an awareness of self and others
- planning and reviewing investigation strategies
- developing the capacity for critical thinking through accessing, analysing and using information from a wide variety of sources
- discussion and informed debate
- developing reasoned and justified points of view
- developing and using maps in a variety of contexts
- developing and applying skills in interpreting and displaying graphical representation of information
- developing an awareness of sequence and chronology
- presentation skills oral, written, multimedia.

Teachers will support children and young people as they progressively develop these skills by applying them in new and more complex contexts. Skills are to be regarded as a continuum and should not be 'capped' at any particular level. The professional judgement of teachers is essential in ensuring that individual learners are faced with the appropriate level of challenge in developing skills.

What are broad features of assessment in social studies?

Assessment in social studies will focus on children and young people's knowledge, understanding and skills in their studies of people, past events, society, place, environment, economy and business.

Teachers can gather evidence as part of day-to-day learning, as children and young people describe and record, explore and analyse sources, interpret and display information, talk and debate with peers and adults, undertake investigations and present their thinking orally, in writing or in a multimedia format. Specific assessment tasks will be valuable in assessing progress. From the early years through to the senior stages, children and young people can demonstrate their progress through their skills in using differing sources of evidence, in assessing its validity and reliability, and in applying these in everyday life and work. This will Social studies: principles and practice 280

include assessment of how well children and young people can use their knowledge and understanding to interpret evidence and present an informed view, progressing to being able to sustain a line of argument. Learners can also demonstrate evidence of progress through their abilities in applying their knowledge and skills in increasingly demanding and/or unfamiliar contexts, such as environmental issues, citizenship, and their awareness of the world and Scotland's place in it.

Approaches to assessment should identify the extent to which children and young people can apply these skills in their learning and their daily lives and in preparing for the world of work. For example:

- Do they show awareness of the importance of participating in decision-making processes?
- How well are they prepared to contribute to discussions on local, national and global issues?

Children and young people can demonstrate progression in knowledge, understanding and skills by how well they deal with increasingly demanding and challenging concepts within a wide range of economic, geographical, historical, political and social contexts. Progress can be seen in their:

- growing abilities to understand the complexity of such issues with increasing maturity and empathy
- increasingly sophisticated views
- skills in supporting these by reference to carefully-considered evidence and sources
- abilities to draw together their learning to demonstrate the depth of their understanding, for example of Scotland's history.

Assessment should also link with other areas of the curriculum, within and outside the classroom, offering children and young people opportunities to develop awareness of social issues such as sustainability and enterprise through field trips, visits to local and national heritage sites, and meetings with members of the community.

What connections are there between social studies and other areas of the curriculum?

Social studies experiences and outcomes encourage links with other areas of learning to provide learners with a deeper, more enjoyable and active experience.

The promotion of active citizenship is a central feature of learning in social studies as children and young people develop skills and knowledge to enable and encourage participation. Within social studies, practitioners will plan opportunities for children and young people to become involved in their local community and the wider world to support them in considering and developing their roles as active and informed citizens.

All staff teaching social studies will identify opportunities to develop and reinforce social studies knowledge and skills both, within their own teaching activities and through working with their colleagues to plan interdisciplinary studies and a coherent approach to the development of literacy, numeracy, citizenship, creativity, enterprise and sustainability.

Teachers have opportunities to combine statements of experiences and outcomes in various ways. They can group them around important concepts in social studies; they can organise statements to provide a basis for a subject-based approach; they can group experiences and outcomes around common learning contexts in social studies.

Through self-evaluation, schools, departments and teachers will plan a balance of learning and teaching approaches, learning that develops all the attributes and capabilities of the four capacities, a coherent approach to important themes such as citizenship and enterprise, progression in skills and understanding, and effective use of interdisciplinary work to deepen and extend learning.

Social studies Experiences and outcomes

Learning in the social studies will enable me to:

- develop my understanding of the history, heritage and culture and an appreciation of my local and national heritage within the world
- broaden my understanding of the world by learning about human activities and achievements in the past and present
- develop my understanding of my own values, beliefs and cultures and those of others
- develop my understanding of the principles of democracy and citizenship through experience of critical and independent thinking
- explore and evaluate different types of sources and evidence
- learn how to locate, explore and link periods, people and events in time and place
- learn how to locate, explore and link features and places locally and further afield
- engage in activities which encourage enterprising attitudes
- develop an understanding of concepts that stimulate enterprise and influence business
- establish firm foundations for lifelong learning and for further specialised study and careers.

People, past events	and societies			
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I am aware that different types of evidence can help me to find out about the past.	I understand that evidence varies in the extent to which it can be trusted and can use this in learning about the past.	I can use primary and secondary sources selectively to research events in the past.	I can use my knowledge of a historical period to interpret the evidence and present an informed view.	I can evaluate conflicting sources of evidence to sustain a line of argument.
I can make a personal link to the past by exploring items or images connected with important individuals or special events in my life.	By exploring places, investigating artefacts and locating them in time, I have developed an awareness of the ways we remember and preserve Scotland's history.	I can interpret historical evidence from a range of periods to help to build a picture of Scotland's heritage and my sense of chronology.	I can make links between my current and previous studies, and show my understanding of how people and events have contributed to the development of the Scottish nation.	I have developed a sense of my heritage and identity as a British, European or global citizen and can present arguments about the importance of respecting the heritage and identity of others.
	I can use evidence to recreate the story of a place or individual of local historical interest.	I can investigate a Scottish historical theme to discover how past events or the actions of individuals or groups have shaped Scottish society.	I can explain why a group of people settled here in the past and discuss the impact they have had on the life and culture of the land.	

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I have explored how people lived in the past and have used imaginative play to show how their lives were different from my own and the people around me.	I can compare aspects of people's daily lives in the past with my own by using historical evidence or the experience of recreating an historical setting.	I can compare and contrast a society in the past with my own and contribute to a discussion of the similarities and differences.	I can explain the similarities and differences between the lifestyles, values and attitudes of people in the past by comparing two societies.	By studying groups in past societies who experienced inequality, I can explain the reasons for the inequality and evaluate how groups or individuals addressed it. I can describe the main features of conflicting world belief systems in the past and can present informed views on the consequences of such conflict for societies then and since.
				I can make reasoned judgements about how the exercise of power affects th rights and responsibilities or citizens by comparing a mo democratic and a less democratic society.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
			I can describe the factors contributing to a major social, political or economic change in the past and can assess the impact on people's lives.	I can present supported conclusions about the soci political and economic impacts of a technological change in the past.
				I can evaluate the changes which have taken place in industry in Scotland's past and can debate their impa
				I have investigated a meeting of cultures in the past and can analyse the impact on the societies involved.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
	Having selected a significant individual from the past, I can contribute to a discussion on the influence of their actions, then and since.	I can discuss why people and events from a particular time in the past were important, placing them within a historical sequence.	I can discuss the motives of those involved in a significant turning point in the past and assess the consequences it had then and since.	Having critically analysed significant historical event, can assess the relative importance of factors contributing to the event.
			Through researching, I can identify possible causes of a past conflict and report on the impact it has had on the lives of people at that time.	I can express an informed view about the changing nature of conflict over time appreciate its impact and empathise with the experiences of those involved.
				I can describe attempts to resolve an international conflict and maintain the peace and can present m conclusion about how effective these attempts were.
				I can assess the impact for those involved in a specifi instance of the expansion power and influence in the past.

People, place and er	vironment			
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I explore and discover the interesting features of my local environment to develop an awareness of the world around me.	I can describe and recreate the characteristics of my local environment by exploring the features of the landscape.	I can describe the major characteristic features of Scotland's landscape and explain how these were formed. I can describe the physical processes of a natural disaster and discuss its impact on people and the landscape.	Having investigated processes which form and shape landscapes, I can explain their impact on selected landscapes in Europe and beyond.	I can explain how the interaction of physical systems shaped and continue to shape the Earth's surface by assessing their impact on contrasting landscape types.
I explore and appreciate the wonder of nature within different environments and have played a part in caring for the environment.	I can consider ways of looking after my school or community and can encourage others to care for their environment.	I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally- responsible way. I can consider the advantages and disadvantages of a proposed land use development and discuss the impact this may have on the community.	I can identify the possible consequences of an environmental issue and make informed suggestions about ways to manage the impact.	I can discuss the sustainability of key natural resources and analyse the possible implications for human activity.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I explore and discover where foods come from as I choose, prepare and taste different foods.	Having explored the variety of foods produced in the world, I can discuss the importance of different types of agriculture in the production of these foods.			Having evaluated the role of agriculture in the production of food and raw material, I can draw reasoned conclusions about the environmental impacts and sustainability.
I have experimented with imaginative ways such as modelling and drawing, to represent the world around me, the journeys I make and the different ways I can travel.		Having explored the ways journeys can be made, I can consider the advantages and disadvantages of different forms of transport, discussing their impact on the environment.		I can assess the impact of developments in transport infrastructure in a selected area and can contribute to a discussion on the development of sustainable systems.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
		Having explored my local area, I can present information on different places to live, work and relax and interesting places to visit.	I can investigate the climate, physical features and living things of a natural environment different from my own and explain their interrelationship.	I can develop my understanding of the interaction between humans and the environment by describing and assessing th impact of human activity on an area.
				I can explain the development of the main features of an urban area in the world and can evaluate the implications for the society concerned.
				Having studied an economi activity, I can explain its development and assess th impact of change within its locality and beyond.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
	By exploring my community and the groups within it, I can identify and consider different types of housing and how they meet needs.		I can compare the social and economic differences between more and less economically-developed countries and can discuss the possibilities for reducing these differences.	Having researched the globalisation of trade, I can explain the interdependence of different parts of the wor and assess the impacts for providers, consumers and the environment.
				I can explain how the distribution and control of important natural resources affects the international power and influences of states.
				I can compare the populati structure of contrasting countries and can express informed views about the future implications for thes societies.

People, place and en	vironment (continued)			
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
While learning outdoors in differing weathers, I have described and recorded the weather, its effects and how it makes me feel and can relate my recordings to the seasons.	By using a range of instruments, I can measure and record the weather and can discuss how weather affects my life.	By comparing my local area with a contrasting area outwith Britain, I can investigate the main features of weather and climate, discussing the impact on living things.	I can investigate the relationship between climate and weather to be able to understand the causes of weather patterns within a selected climate zone.	I can identify threats facing the main climate zones, including climate change, and analyse how these threats impact on the way of life.
	By exploring climate zones around the world, I can compare and describe how climate affects living things.			I can carry out a geographical enquiry to assess the impact and possible outcomes of climate change on a selected region and can propose strategies to slow or reverse the impact.
				I can demonstrate an understanding of weather and climate by explaining the relationship between weather and air pressure.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
	Having explored the landscape of my local area, I can describe the various ways in which land has been used. By exploring a natural environment different from my own, I can discover how the physical features influence the variety of living things.	I can explain how the physical environment influences the ways in which people use land by comparing my local area with a contrasting area.	By comparing settlement and economic activity in two contrasting landscapes, I can reach conclusions about how landscapes influence human activity. I can explain my findings clearly to others.	
	Through activities in my local area, I have developed my mental map and sense of place. I can create and use maps of the area.	To extend my mental map and sense of place, I can interpret information from different types of maps and am beginning to locate key features within the wider world.	I can use a range of maps and geographical information systems to gather, interpret and present conclusions and can locate a range of features within the wider world.	I can use specialised maps and geographical informatic systems to identify patterns of human activity and physical processes.

People in society, economy and business				
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I am aware that different types of evidence can help me to find out about the world around me.	I understand that evidence varies in the extent to which it can be trusted and can use this in learning about current issues in society.	I can use evidence selectively to research current social, political or economic issues.	I can use my knowledge of current social, political or economic issues to interpret evidence and present an informed view.	I can evaluate conflicting sources of evidence to sustain a line of argument.
By exploring my local community, I have discovered the different roles people play and how they can help.	I can contribute to a discussion of the difference between my needs and wants and those of others around me.	I can explain how the needs of a group in my local community are supported.	I can explain why a group I have identified might experience inequality and can suggest ways in which this inequality might be addressed.	I can contribute to a discussion on the extent to which people's needs should be met by the state or the individual.
		I can gather and use information about forms of discrimination against people in societies and consider the impact this has on people's lives.		Through discussion, I have identified aspects of a social issue to investigate and by gathering information I can assess its impact and the attitudes of the people affected.
		I can discuss issues of the diversity of cultures, values and customs in our society.		I can analyse the factors contributing to the development of a multicultural society and can express an informed view on issues associated with this.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
I make decisions and take responsibility in my everyday experiences and play, showing consideration for others.	By exploring the ways in which we use and need rules, I can consider the meaning of rights and responsibilities and discuss those relevant to me.	I can describe the main features of a democracy and discuss the rights and responsibilities of citizens in the world.	I have compared the rights and responsibilities of citizens in a contrasting society and can describe and begin to understand reasons for differences.	I can critically analyse the relative importance of the contribution of individuals or groups in bringing about change in a significant political event.
			I can discuss the extent to which my choices and decisions are influenced by the ways in which I am informed.	I can evaluate the role of the media in a democracy, assess its importance in informing and influencing citizens, and explain decisions made by those in power.
				I can compare and contrast two world ideologies to express an informed view on how ideology affects the lives of people.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Within my everyday experiences and play, I make choices about where I work, how I work and who I work with.	I have participated in decision making and have considered the different options available in order to make decisions.	I can investigate the features of an election and the work of representatives at a local, national or European level to begin to develop my understanding of how democracy works.	I understand the arrangements for political decision making at different levels and the factors which shape these arrangements.	I can evaluate the impact which decision making bodies have on the lives of people in the world. I can debate the reasons wh some people participate less than others in the electoral process and can express informed views about the importance of participating in a democracy. I can contribute to a discussion on the actions and motives of a group or organisation which seeks to achieve its aims by non- democratic means.

COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
		By comparing the lifestyle and culture of citizens in another country with those of my own, I can discuss the similarities and differences.	I can describe how the interdependence of countries affects levels of development, considering the effects on people's lives.	I can present an informed view on how the expansion of power and influence of countries or organisations may impact on the cultures attitudes and experiences of those involved.
			Having considered responses to a recent international crisis, I can contribute to a discussion of the effectiveness of the responses.	By examining the role and actions of selected international organisations, can evaluate how effective they are in meeting their aims.

People in society, economy and business (continued)					
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
In real-life settings and imaginary play, I explore how local shops and services provide us with what we need in our daily lives.	I have developed an understanding of the importance of local organisations in providing for the needs of my local community.	Through exploring ethical trading, I can understand how people's basic needs are the same around the world, discussing why some societies are more able to meet these needs than others.	When participating in an enterprise activity, I can explore ethical issues relating to business practice and gain an understanding of how businesses help to satisfy needs.	I can critically examine how some economic factors can influence individuals, businesses or communities. I can research the purposes and features of private, public and voluntary sector organisations to contribute to a discussion on their relationships with stakeholders.	
			I can present conclusions about the impact of the globalisation of trade on patterns of work and conditions of employment in the world.	I can evaluate working practices available to employees within different types of business organisations.	

Social studies: experiences and outcomes

People in society, economy and business (continued)					
COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
	I can work out the amount of money I need to buy items, understanding that I may not always be able to afford the items I want.	I can identify essential goods and services, discuss the different ways to pay for them, considering the benefits and risks of each method.	I can understand the necessity for budgeting and determine ways to manage finance, considering possible investment opportunities, savings, risks or borrowing needs.	I can evaluate the suitability of finance options available for setting up and supporting different types of businesses. Having considered the financial needs of individuals and businesses, I can evaluate, prepare and present financial information and documents to assist in making appropriate financial decisions.	
	I have experienced the different jobs involved in running a business enterprise and understand the role each one plays in its success.	By experiencing the setting up and running of a business, I can collaborate in making choices relating to the different roles and responsibilities and have evaluated its success.		By researching the organisation of a business, I can discuss the role of departments and personnel, evaluating how they contribute to the success or failure of the business. I can identify internal and external factors influencing planning and decision making and can assess how these decisions contribute to the success or failure of businesses.	

curriculum for excellence: technologies

Technologies Principles and practice

What are the main purposes of learning in the technologies?

Learning in the technologies enables children and young people to be informed, skilled, thoughtful, adaptable and enterprising citizens, and to:

- develop understanding of the role and impact of technologies in changing and influencing societies
- contribute to building a better world by taking responsible ethical actions to improve their lives, the lives of
 others and the environment
- gain the skills and confidence to embrace and use technologies now and in the future, at home, at work and in the wider community
- become informed consumers and producers who have an appreciation of the merits and impacts of products and services
- be capable of making reasoned choices relating to the environment, to sustainable development and to ethical, economic and cultural issues
- broaden their understanding of the role that information and communications technology (ICT) has in the global community
- broaden their understanding of the applications and concepts behind technological thinking, including the nature of engineering and the links between the technologies and the sciences
- experience work-related learning, establish firm foundations for lifelong learning and, for some, for specialised study and a diverse range of careers.

How are the technologies experiences and outcomes organised?

The technologies framework has been organised to offer opportunities for personalisation and choice using diverse contexts for learning.

The technologies framework has six organisers, namely:

- technological developments in society
- ICT to enhance learning
- business
- computing science
- food and textiles
- craft, design, engineering and graphics.

The final four organisers are contexts for developing technological skills and knowledge.

These organisers recognise the special contribution made by each context for learning, whilst enabling teachers to plan opportunities to reflect individual and local needs. The important purposes of the technologies depend upon effective interdisciplinary working through connections across and between subject boundaries. It is important that teachers do not feel constrained by the organisers but view them as opportunities for children and young people to experience the differing contexts for learning.

In secondary schools, teachers of business education, computing, home economics and technical education will recognise how they can make their specialist contributions within the framework. Schools and teachers will plan different combinations of the experiences and outcomes to provide programmes that meet young people's needs and provide a sound basis for more advanced study within an area of specialism. As in other curriculum areas, the fourth level experiences and outcomes provide possibilities for choice: it is not intended that any individual young person's programme of learning would include all of the fourth level outcomes.

Teachers in their planning will use the framework to ensure that children and young people develop their understanding of important themes such as the impact of technology, informed attitudes to technology, sustainability, and social, economic and ethical issues. These will underpin and continually reinforce learning within the technologies.

The framework contains some statements which span two levels. These provide space for teachers to plan for progression over an extended period of time, enabling children and young people to explore contexts in increasing depth and develop their creativity through independent learning.

The framework allows opportunity for personalisation and choice, depth and relevance. The level of achievement at the fourth level has been designed to approximate to that associated with SCQF level 4. The technologies framework offers children and young people opportunities to develop a set of skills that can be utilised in Skills for Work programmes.

What skills are developed in the technologies?

The technologies provide frequent opportunities for active learning in creative and work-related contexts. Learning in the technologies thus provides opportunities to continually develop, use and extend skills that are essential components for life, work and learning, now and in the future, including planning and organisational skills.

Well-designed practical activities in the technologies offer children and young people opportunities to develop:

- curiosity and problem-solving skills, a capacity to work with others and take initiative
- planning and organisational skills in a range of contexts
- creativity and innovation, for example though ICT and computer aided design and manufacturing approaches
- skills in using tools, equipment, software and materials
- skills in collaborating, leading and interacting with others

- critical thinking through exploration and discovery within a range of learning contexts
- discussion and debate
- searching and retrieving information to inform thinking within diverse learning contexts
- making connections between specialist skills developed within learning and skills for work
- evaluating products, systems and services
- presentation skills.

What learning and teaching approaches are useful in the technologies?

The experiences and outcomes are intended to tap into children's and young people's natural inventiveness and their desire to create and work in practical ways. They act as a motivation for progressively developing skills, knowledge, understanding and attitudes, and so maximise achievement. Effective learning and teaching will draw upon a wide variety of approaches to enrich the experience of children and young people, particularly through collaborative and independent learning.

The experiences and outcomes are well suited for learning beyond school: in colleges, in the voluntary sector and in partnership with businesses, where children and young people may experience learning activities that are relevant to employment or future vocational learning.

Proficiency in ICT is an ideal vehicle for shared learning between and amongst children, young people and teachers. Many teachers may need to build their own knowledge and confidence, often learning with and from children and young people, in this area of continually evolving developments.

What does ICT mean within this framework?

ICT refers to forms of technology that are used to transmit, store, create, display, share or exchange information by electronic means. This broad definition of ICT currently includes such technologies as media, telecommunications, and computer hardware and software; it also includes equipment and services associated with these technologies, such as videoconferencing, email and blogs.

How can ICT enhance learning and teaching?

In the words of the HMIE publication *Improving Scottish Education: ICT in Learning and Teaching* (2007), '... staff in pre-school centres and in primary schools recognised that learners developed awareness of the world in which they live more effectively when this included engagement with the world through ICT.'

Being skilled in using ICT is essential if children and young people are to be effective contributors able to communicate and interact on a global scale. Across the curriculum, skills in ICT will be developed in the context of the learning and teaching as appropriate to the child or young person's maturity. All teachers, in all sectors, in all departments and in all settings, have opportunities to apply, reinforce and extend ICT skills within and across curriculum areas to equip children and young people with the learning and employability skills required for the 21st century.

Several curriculum areas including the technologies provide opportunities for children and young people to consider security aspects associated with ICT, for example keeping personal data secure, and the important consequences of these for individuals. It is important for children and young people to recognise security risks when handling information across the curriculum, and act accordingly.

What is the difference between computing and ICT?

ICT, as defined here, brings together different forms of technologies and applies them to communication and learning, whereas computing, as an area of specialised study, provides deeper theoretical and practical understanding of how hardware and software can be developed and applied in a range of contexts. This area of specialist study has particular relevance in preparing children and young people for the challenges of rapidly changing digital technologies. It will enable learners to prepare for more advanced specialised study and careers within computing science.

What is the significance of the italicised experiences and outcomes in ICT?

Within the technologies framework, the ICT experiences and outcomes identified in italics promote the development of those skills required for everyday life and work. Although these form part of the technologies framework, all teachers will contribute and reinforce them throughout learning.

What are broad features of assessment in technologies?

Assessment in the technologies will focus on practical, problem-solving and collaborative activities which enable children and young people to show that they know, understand and can use technological skills and concepts across all the contexts for learning in the technologies.

Teachers can gather evidence as part of children and young people's day-to-day learning, and specific assessment tasks will also contribute to assessing progress. From the early years through to the senior stages, children and young people can demonstrate progress in their skills in making models and preparing food, in planning and carrying out practical investigations and solving problems, in discussing and debating ideas with peers and adults, and in recording and presenting their thinking in different ways, including using ICT.

Approaches to assessment should identify the extent to which children and young people can apply these skills and use them creatively in their learning and their daily lives and in preparing for the world of work. For example:

- How well do they contribute ideas and suggestions and develop team working skills?
- How well do they collaborate and independently participate in learning activities which lead to products with real uses?

Children and young people can show progress by responding enthusiastically to more demanding and challenging concepts in technologies, showing increasing depth of understanding in their explanations, and applying knowledge and skills in more demanding or unfamiliar contexts. They can also demonstrate progress through their increasing independence and confidence when carrying out tasks and their increasing resilience in facing challenges. Progress includes increasingly well-structured explanations and well-argued opinions and conclusions, including developing informed views on environmental, ethical and economic issues. Assessment should also link with other areas of the curriculum, both within and outside the classroom, and in the context of the world of work.

How can I make connections within and beyond the technologies?

Technologies are connected strongly with all other areas of the curriculum, through extending and applying the specialist knowledge and understanding developed in the sciences, through the creative use of technology in the expressive arts, through interdisciplinary learning, for example linking mathematics, science and technologies in an engineering context, and through the use of technologies to enhance learning.

In order to foster deeper, more enjoyable and active learning, the technologies experiences and outcomes enable clear links to be made with all other curriculum areas. For example, design, creative thinking and aesthetics are central to both the technologies and the expressive arts and can provide a platform for planning exciting interdisciplinary working as well as presenting rich contexts for reinforcing the four capacities. Such connections mutually enhance the application and interpretation of designing, offering learners opportunities to become independent in designing solutions to meet real-life needs and challenges, and adept at solving problems of increasing scale and complexity. They extend the creative process, building on the interests of children and young people to provide enjoyable learning opportunities and enhance self-esteem, for example the relationship and interaction of engineering with technologies and with science. In a wider context, the experiences and outcomes have the capacity to link with fundamental concepts, including those of engineering, mathematics and science.

Through planning and self-evaluation, establishments and departments will need to ensure an appropriate balance of learning and teaching approaches, progression in skills, and effective use of interdisciplinary work to deepen and extend learning and reinforce themes.

In planning, it is important to recognise that experiences and outcomes should not be considered as requiring particular amounts of time. Many are very open, allowing the opportunity for exploration and depth.

Technologies Experiences and outcomes November 2016



The technologies framework provides a range of different contexts for learning, including the themes across learning; learning for sustainability, global citizenship, enterprise, that draw on important aspects of everyday life and work.

The framework develops knowledge, skills, attributes and capabilities around 13 key concepts/significant aspects of learning in the technologies.

- Awareness of technological developments (Past, Present and Future), including how they work.
- Impact, contribution, and relationship of technologies on business, the economy, politics, and the environment.
- Using digital products and services in a variety of contexts to achieve a purposeful outcome
- Searching, processing and managing information responsibly
- Cyber resilience and internet safety
- Understanding the world through computational thinking
- Understanding and analysing computing technology
- Designing, building and testing computing solutions
- Food and textile technologies
- Designing & constructing models/products
- Exploring uses of materials
- Representing ideas, concepts and products through a variety of graphic media
- Application of Engineering

Within each of the key concepts/significant aspects of learning learners will develop and demonstrates

- knowledge and understanding of the key concepts in the technologies
- curiosity, exploration and problem solving skills
- planning and organisational skills in a range of contexts
- creativity and innovation
- skills in using tools, equipment, software, graphic media and materials
- skills in collaborating, leading and interacting with others
- critical thinking through exploration and discovery within a range of learning contexts
- discussion and debate
- searching and retrieving information to inform thinking within diverse learning contexts
- making connections between specialist skills developed within learning and skills for work
- evaluating products, systems and services
- presentation and communication skills.
- awareness of sustainability

The framework includes creative, practical and work-related experiences and outcomes which develop skills for business, digital literacy, computing science, food, textiles, craft, design, engineering, graphics and applied technologies. Learning, teaching and assessment in the technologies should span a range of the 13 key significant aspects of learning, for example when planning business education in S1 to S3 it should cover Digital Literacy significant aspects of learning and Technological Developments in Society and Business significant aspects of learning (as well as Social subject significant aspects of learning).

As with literacy, numeracy and health and wellbeing, digital literacy should be placed at the heart of all learning, not only the technologies area of the curriculum. Digital literacy outcomes could be met in any/all curriculum areas and so all practitioners can contribute to and reinforce them.

Digital Literacy					
Organiser	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Using digital products and services in a variety of contexts to achieve a purposeful outcome	I can explore digital technologies and use what I learn to solve problems and share ideas and thoughts.	I can explore and experiment with digital technologies and can use what I learn to support and enhance my learning in different contexts.	I can extend and enhance my knowledge of digital technologies to collect, analyse ideas, relevant information and organise these in an appropriate way.	I can explore and use the features of a range of digital technologies, integrated software and online resources to determine the most appropriate to solve problems.	I can select and use digital technologies to access, select relevant information and solve real world problems.
Searching, processing and managing information responsibly	I can use digital technologies to explore how to search and find information.	Using digital technologies responsibly I can access, retrieve and use information to support, enrich or extend learning in different contexts.	I can use digital technologies to search, access and retrieve information and am aware that not all of this information will be credible.	Having used digital technologies to search, access and retrieve information I can justify my selection in terms of validity, reliability and have an awareness of plagiarism.	I can use digital technologies to process and manage information responsibly and can reference sources accordingly.
Cyber resilience and internet safety	I can explore, play and communicate using digital technologies safely and securely.	I can extend my knowledge of how to use digital technology to communicate with others and I am aware of ways to keep safe and secure.	I can explore online communities demonstrating an understanding of responsible digital behaviour and I'm aware of how to keep myself safe and secure.	I can keep myself safe and secure in online environments and I am aware of the importance and consequences of doing this for myself and others.	I can explore the impact of cyber-crime for business and industry and the consequences this can have on me.

Organiser	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Food and Textile	 I enjoy exploring and working with foods in different contexts I enjoy experimenting with a range of textiles I can share their thoughts with others to h`elp further develop ideas and solve problems. 	I can use a range of simple food preparation techniques when working with food I can use a range of tools and equipment when working with textiles I am developing and using problem solving strategies to meet challenges with a food or textile focus I can adapt and improve ideas and can express my own thinking in different ways	I am developing dexterity, creativity and confidence when preparing and cooking food I am developing dexterity, creativity and confidence when working with textiles I can extend and explore problem solving strategies to meet increasingly difficult challenges with a food or textile focus I can discuss, debate and improve my ideas with increasing confidence and clear explanations	I am gaining confidence and dexterity in the use of ingredients and equipment and can apply specialist skills in preparing food. I can use textile skills in practical and creative situations in my place of learning, at home or in the world of work By using problem-solving strategies and showing creativity in a design challenge, I can plan, develop, make and evaluate food or textile items which meet needs at home or in the world of work.	I can explore the properties and functionalit of ingredients, textiles and equipment to establish their suitability for a task a home or in the world of work. I can confidently apply preparation techniques and processes to make food and textile items using specialist skills, materials, equipment in m place of learning, at home or in the world of work. Showing creativity and innovation I can design, plan and produce increasingly complex food or textile items which satisfy the needs of the user, at home or in the world of work. I can apply skills of critica thinking when evaluating the quality and effectiveness of my own of others' products.

Organiser	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Awareness of technological developments (Past, Present and Future), including how they work.	I enjoy playing with and exploring technologies to discover what they can do and how they can help us.	I can explore the latest technologies and consider the ways in which they have developed.	I can investigate how product design and development have been influenced by changing lifestyles.	I understand how scientific and technological developments have contributed to changes in everyday products.	I can analyse products taking into consideration sustainability, scientific and technological developments.
Impact, contribution, and relationship of technologies on business, the economy, politics, and the environment.	To help care for the environment, I reduce, re-use and recycle the resources I use.	I can take appropriate action to ensure conservation of materials and resources, considering the impact of my actions on the environment.	I can analyse how lifestyles can impact on the environment and Earth's resources and can make suggestions about how to live in a more sustainable way.	I can evaluate the implications for individuals and societies of the ethical issues arising from technological developments.	I can examine a range of materials, processes or designs in my local community to consider their environmental, socia and economic impact.
	I understand how local shops and services use technologies to provide us with what we need and want in our daily lives.	I understand how technologies help provide for our needs and wants, and how they can affect the environment in which we live.	I can make suggestions as to how individuals and organisations may use technologies to support sustainability and reduce the impact on our environment.	I can identify the costs and benefits of using technologies to reduce the impact of our activities on the environment and business.	I can present conclusions about the impact of technologies on the economy, politics and the environment.
				I can explore the impact, contribution and use of various software applications and emerging hardware in business.	I can select and use appropriate hardware and software which supports evolving business activities.

Craft, Design, Engineering and Graphics						
Organiser	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Design and construct models/product	I explore ways to design and construct models.	I can design and construct models and explain my solutions.	I can extend and enhance my design skills to solve problems and can construct models.	I can create solutions in 3D and 2D and can justify the construction/graphic methods and the design features.	I can apply design thinking skills when designing and manufacturing models/products which satisfy the user or client.	
Exploring uses of materials	I explore everyday materials in the creation of pictures/models/concepts.	I can recognise a variety of materials and suggest an appropriate material for a specific use.	I can recognise basic properties and uses for a variety of materials and can discuss which ones are most suitable for a given task.	I can explore the properties and performance of materials before justifying the most appropriate material for a task.	I consider the material performance as well as sustainability of materials and apply these to real world tasks.	
Representing ideas, concepts and products through a variety of graphic media	I explore and discover different ways of representing ideas in imaginative ways.	I can explore and experiment with sketching, manually or digitally, to represent ideas in different learning contexts.	I can use a range of graphic techniques, manually and digitally, to communicate ideas, concepts or products, experimenting with the use of shape, colour and texture to enhance my work.	I can apply a range of graphic techniques and standards when producing images using sketching, drawing and software.	I can extend my use of manual and digital graphic techniques to realise ideas, concepts and products and recognise the importance of real world standards.	
Application of Engineering	I explore a variety of products covering a range of engineering disciplines.	I explore and discover engineering disciplines and can create solutions.	I can extend my knowledge and understanding of engineering disciplines to create solution.	I can apply my knowledge and understanding of engineering disciplines and can develop/build solutions to given tasks.	I can solve problems through the application of engineering principles and can discuss the impact engineering has on the world around me.	

Organiser	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4
Understanding the world through computational thinking	I can explore computational thinking processes involved in a variety of everyday tasks and can identify patterns in objects or information.	I can explore and comment on processes in the world around me making use of core computational thinking concepts and can organise information in a logical way.	I understand the operation of a process and its outcome. I can structure related items of information.	I can describe different fundamental information processes and how they communicate and can identify their use in solving different problems.	I can describe in detail the processes used in real world solutions, compare these processes against alternative solutions and justify which is the most appropriate.
				I am developing my understanding of information and can use an information model to describe particular aspects of a real world system.	I can informally compare algorithms for correctness and efficiency.
Understanding and analysing computing technology	I understand that sequences of instructions are used to control computing technology.	I understand the instructions of a visual programming language and can predict the outcome of a program written using the language.	I can explain core programming language concepts in appropriate technical language.	I understand language constructs for representing structured information	I understand constructs and data structures in a textual programming language
	I can experiment with and identify uses of a range of computing technology in the world around me.	l understand how computers process information.	I understand how information is stored and how key components of computing technology connect and interact through networks.	I can describe the structure and operation of computing systems which have multiple software and hardware levels that interact with each other.	I can explain the overall operation and architecture of a digitally created solution
					I understand the relationship between high level language and the operation of computer

Computing Science (continued)						
Organiser	COC 1	COC 2/ Standard 1	Standard 2	Standard 3	Standard 4	
Designing, building and testing computing solutions	I can develop a sequence of instructions and run them using programmable devices or equivalent.	I can demonstrate a range of basic problem solving skills by building simple programs to carry out a given task, using an appropriate language.	I can create, develop and evaluate computing solutions in response to a design challenge.	I can select appropriate development tools to design, build, evaluate and refine computing solutions based on requirements.	I can select appropriate development tools to design, build, evaluate and refine computing solutions to process and present information whilst making reasoned arguments to justify my decisions.	