



Llywodraeth Cymru Welsh Government

# Curriculum for Wales guidance





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# Introduction to the Curriculum for Wales guidance

The Curriculum for Wales guidance aims to help each school develop its own curriculum, enabling their learners to develop towards the <u>four purposes</u> of the curriculum – the starting point and aspiration for every child and young person in Wales. This guidance will also be relevant for funded non-maintained nursery settings, pupil referral units (PRUs) and those responsible for the provision of education other than at school (EOTAS) in other settings, enabling them to develop an understanding of the Curriculum for Wales Framework (Framework).

The Curriculum for Wales guidance sets out:

- the proposed <u>curriculum requirements</u> set out in legislation for all learners aged 3 to 16, to ensure all schools cover the same core learning and to secure a consistency of approach for learners across Wales
- guidelines for schools in developing their curricula
- expectations around assessment arrangements to support learner progression.

It consists of the following.

- Introduction to the Curriculum for Wales guidance.
- <u>Guidance for legislation an outline of proposed legislation</u>.
- Designing your curriculum general guidance on developing a curriculum across all areas of learning and experience (Area/Areas).
- Introduction to each area of learning and experience.
- Statements of what matters the 'big ideas' and key principles in each Area.
- Principles of progression how learners make progress throughout their learning across the curriculum.
- Descriptions of learning how learners should make progress within each statement of what matters.
- Designing your curriculum principles for each Area more Area-specific guidance on developing a curriculum.
- <u>Supporting learner progression assessment guidance</u>.

A Curriculum and Assessment Bill is proposed for introduction in the Senedd in 2020. To assist schools to develop their curriculum, we will publish the Curriculum for Wales guidance. This is an early version of that guidance and its purpose is to help schools to start thinking about designing their curriculum and the assessment arrangements to support it.

# A vision for every school's curriculum

Improving education is our national mission. Nothing is so essential as universal access to, and acquisition of, the experiences, knowledge and skills and that our young people need for employment, lifelong learning and active citizenship.

The Curriculum for Wales guidance is a clear statement of what is important in delivering a broad and balanced education. The <u>four purposes</u> are the shared vision and aspiration for every child and young person. In fulfilling these, we set high expectations for all, promote individual and national well-being, tackle ignorance and misinformation, and encourage critical and civic engagement.

A school's curriculum is everything a learner experiences in pursuit of the four purposes. It is not simply what we teach, but how we teach and crucially, why we teach it.

Curriculum development should be at the heart of practitioner, school and national efforts which seek to raise standards for all, tackle the attainment gap, and ensure an education system that is a source of national pride and enjoys public confidence.

This development will also contribute to our goals as a nation as set out in the Wellbeing of Future Generations (Wales) Act 2015. It is also an important vehicle for embedding the United Nations Convention on the Rights of the Child (UNCRC) in the experience of learning and teaching for our children and young people and for giving them an understanding of their rights.

# The Curriculum for Wales Framework

The Curriculum for Wales guidance forms part of the Curriculum for Wales Framework (Framework). The Framework is determined nationally and includes both the curriculum requirements, which will be set out in legislation, and a range of supporting guidance.

The Curriculum for Wales guidance, and the other guidance we are publishing alongside it, is the result of co-construction. It has been developed in Wales, by practitioners for practitioners, bringing together educational expertise and wider research and evidence.

It has been published primarily to help schools begin to design their own curriculum. It contains information on the proposed legal requirements, guidance on how to develop a school curriculum, and an explanation of the purposes and principles of assessment. Assessment should be intrinsic to curriculum design. Funded non-maintained settings, pupil referral units (PRUs) and those responsible for the provision of education other than at school (EOTAS), will not be required to design a curriculum in the same way as a maintained school or maintained special school and further, more specific guidance will be published for these settings in 2021 to support them in fulfilling their legal obligations in relation to the Framework.

The Curriculum for Wales guidance is initial guidance and if the Curriculum and Assessment Bill is passed by the Senedd, it will be revised to reflect any changes.

# What's different

### An integrated approach to learning and teaching

The Framework is designed to help practitioners to develop a more integrated approach to learning. The six Areas bring together familiar disciplines and encourage strong and meaningful links across different disciplines. Those individual disciplines will still play an important role, especially as learners progress and begin to specialise. The Curriculum for Wales guidance promotes collaboration and cross-disciplinary planning, learning and teaching, both within and across Areas. This will enable learners to build connections across their learning and combine different experiences, knowledge and skills.

There are 27 statements of what matters in this Framework. These ensure a level of consistency in curriculum design across settings and schools, as learners must develop an understanding of all statements. The process of exploring and revisiting these statements will enable learners to develop ever deeper knowledge over the learning continuum and to progress to a more sophisticated understanding of the key knowledge, ideas and principles in each Area.

This more sophisticated understanding allows learners to value how their learning contributes to these ideas and why it is important, rather than simply being able to recall isolated facts without understanding the context. This progression should be supported by a variety of assessment approaches which enable the learner and the practitioner to understand where a learner is and what they need to do next.

The Framework does not require settings and schools to develop a timetable explicitly structured along the lines of the Areas or to organise the setting or school or staffing on that basis.

# **Designing a school curriculum**

A defining feature of the Framework is that it requires schools to design their own curriculum and assessment arrangements. By itself, it is not an 'off the shelf' programme for delivery. Our new approach recognises:

 the role of leadership in enabling high-quality learning and teaching. Establishing a high-performing education system through high-quality learning and teaching depends on building its professional capacity, developing local leadership, responsibility and decision-making

- within the national framework, schools and practitioners are best placed to make decisions about the needs of their specific learners, including choosing topics and activities which will best support their learning
- the importance of meaningful learning: A content-focused curriculum does not guarantee meaningful learning, only that certain topics are covered to varying extents; instead, the Curriculum for Wales guidance articulates what concepts and essence of learning should underpin a range of different topics, learning activities and acquisition of knowledge
- the need for innovation and creativity: Practitioners select content, enabling them to use their professional skills to drive improved learning and outcomes for their learners
- the scope for practitioners to make greater links between Areas and disciplines: Practitioners will have the licence to use topics and activities to combine meaningful learning from different Areas, disciplines and concepts.

It is for these reasons that the Framework does not try to prescribe a full list of specific topics or activities. That is not to say that the specific topics or activities are unimportant. Instead, the Curriculum for Wales guidance sets out the essence of learning which should underpin them. It is for schools and practitioners, drawing on guidance and resources, to decide what specific experiences, knowledge and skills will support their specific learners to realise the <u>four purposes</u>. This is set within the consistency provided by the national framework. <u>Designing your curriculum</u> gives guidance and support in developing a curriculum, offering key principles that serve as a common starting point for schools.

Other settings can use this as a starting point if they wish, however the Welsh Ministers will:

- be required to provide a curriculum which funded non-maintained nursery settings can adopt. If a setting wished to create its own curriculum, that curriculum would have to meet the requirements set out in the legislation and it could use the Curriculum for Wales guidance to inform their approach
- issue guidance for PRUs and those responsible for EOTAS provision, to support them in providing learning and teaching in line with the Framework and fulfilling their specific responsibilities in the legislation.

### Progression and assessment at the heart of curriculum design

Another defining characteristic of the framework is the emphasis placed on learners' progression. The Curriculum for Wales guidance has been informed by international evidence of what it means to make progress in learning.

The <u>statements of what matters</u> are the basis of learners' progression. It is through exploration of the key ideas and principles contained in these statements that they will develop their learning. Practitioners will need to design learning which supports an increasingly sophisticated understanding and application of the statements of what matters. Taken together, the statements of what matters provide breadth and depth in the curriculum, and a level of consistency in curriculum design across settings and schools. That is why they will be drawn together in a mandatory statement of what matters once the Curriculum and Assessment Bill becomes law.

The Curriculum for Wales guidance describes <u>principles of progression</u> for the curriculum as a whole and for each individual Area. These articulate the ways in which learners make progress in their learning and contribute to the <u>four purposes</u>. These will be incorporated in a statutory code once the Curriculum and Assessment Bill becomes law. This means that progression must be embedded in learning and teaching and should form the basis of thinking in schools when designing and planning the school curriculum.

Progression is further supported by <u>descriptions of learning</u> which provide guidance on how learners should progress within each statement of what matters as they journey through the continuum of learning. These are arranged in five progression steps which provide reference points for the pace of that progression. These expectations are expressed from the learner's perspective and are framed broadly so that they can sustain learning over a series of years. They are not designed as stand-alone tasks, activities or assessment criteria. While the learning continuum is the same for each learner, the pace of progress through it may differ. As a result, the progression steps only broadly relate to age. They broadly correspond to expectations at ages 5, 8, 11, 14 and 16.

Together, the principles of progression and the descriptions of learning are intended to guide the development of a curriculum which reflects appropriate progression. Learners' progress can then be identified through assessment, and allows practitioners to plan learning and teaching.

Progression should be supported through 'deep' learning. Each description of learning is designed to support increasing depth and sophistication of learning over time. This allows: space for a variety of diversion, repetition and reflection as learners' thinking develops over time to new levels of sophistication. They are also designed to be considered through a range of contexts.

Learning should bring together through experiences a breadth of knowledge and skills, allowing the learners to use and apply them in new and challenging contexts. Assessment is key to supporting 'deep' learning and should be used to identify whether learners need to consolidate their learning, whether further support is needed and the next steps for learners' progress.

Assessment is intrinsic to curriculum design. Its overarching purpose is to support every learner to make progress. Assessment should always focus on moving learning forward by understanding the learning which has already taken place and using this to ensure that each learner is challenged and supported appropriately, according to their individual learning needs. It requires partnerships among all those involved, including the learner. It should recognise the individual learning needs and backgrounds of each learner and encourage a holistic view of each learner's development. Accordingly, both practitioner and learner should develop an understanding of how the learner learns and their attitude and approach to learning, in order to support them to continue to progress and to foster commitment to their learning.

# **Curriculum for Wales: summary of proposed legislation**

# Introduction

A Curriculum and Assessment Bill (Bill) is proposed for introduction in the Senedd in 2020. To assist in the implementation of that Bill, we propose to issue a range of guidance to support practitioners. This will include a summary of the legislation that will underpin the curriculum that schools will develop.

This is an early iteration of that summary. It is not exhaustive and only highlights the key proposals, at this stage.

If the Bill is passed by the Senedd, this summary and the rest of the guidance will be revised to reflect any changes.

### **Purpose**

The curriculum requirements, set out in legislation, and the supporting guidance we are publishing, form the Curriculum for Wales Framework (Framework).

At this stage, the purpose of this summary and the rest of the guidance is to help schools to start thinking about designing their curriculum and the assessment arrangements to support it. It also aims to assist funded non-maintained nursery settings, pupil referral units (PRUs) and persons who commission education other than at school (EOTAS) in other settings to understand more about the Framework.

It summarises the duties that we propose to place on headteachers and governing bodies of schools by the Bill.

A number of components of the new curriculum framework will be mandatory and will have to be complied with – these are the <u>curriculum requirements</u>. This summary sets out what these are and how they will need to be used in designing a curriculum.

Beyond the curriculum requirements, schools will have discretion as to how they design their curriculum. This summary, and the wider guidance, aims to support schools in preparing for how they will exercise that discretion.

It also summarises the requirements that will be placed on providers of funded, nonmaintained nursery education and on PRUs and local authorities as commissioners of EOTAS provision. They will not be subject to the same requirements as schools to design a curriculum. Separate, specific guidance will be provided for these settings in 2021.

This summary also highlights key requirements to be placed on local authorities and the Welsh Ministers.

If the Bill is passed, this summary will be updated and expanded to help in the design, adoption and implementation of a school curriculum or other relevant curriculum. Additional guidance will also be issued about how schools, funded non-maintained nursery education providers, PRUs and persons who arrange EOTAS provision, local authorities and Welsh Ministers can exercise their duties and powers in relation to the new curriculum and assessment arrangements.

# Who does this Framework apply to?

The Bill will create new curriculum requirements for all learners aged 3 to 16 in maintained or funded non-maintained nursery education. It will replace the current national curriculum and basic curriculum.

The legislation will place duties on and provide powers for headteachers and governing bodies of maintained schools, providers of funded non-maintained education, persons who arrange EOTAS, the person in charge of a PRU, local authorities and the Welsh Ministers. Duties must be complied with. Powers provide a discretion as to if, and how, they are to be used.

# **Proposed legislative requirements – the curriculum requirements**

We propose to set out core concepts that will apply in relation to each curriculum and any learning for which the Bill makes provision.

#### The four purposes

The purpose of a curriculum is to enable learners to develop as:

- ambitious, capable learners, ready to learn throughout their lives
- enterprising, creative contributors, ready to play a full part in life and work
- ethical, informed citizens of Wales and the world
- healthy, confident individuals, ready to lead fulfilling lives as valued members of society.

Enabling learners to progress in relation to these purposes is intended to inform all decisions in relation to school's curriculum and assessment arrangements. It will also inform all decisions on the learning and teaching for learners in PRUs and the arrangements made for learners who receive EOTAS in other settings.

#### **General requirements**

All maintained schools and funded non-maintained nursery settings must adopt a curriculum. An adopted curriculum must meet the following general requirements.

- Enable learners to make progress towards the four purposes.
- Be broad and balanced.
- Be suitable for learners of differing ages, abilities and aptitudes.
- Provide for appropriate progression for learners and includes a range of provision to ensure this (linked to ages, abilities and aptitudes).

#### The areas of learning and experience

The following six areas of learning and experience (Area/Areas) must be reflected in the adopted curriculum.

- Expressive Arts.
- Health and Well-being.
- Humanities.
- Languages, Literacy and Communication.
- Mathematics and Numeracy.
- Science and Technology.

The Welsh Ministers will have powers to add and remove Areas.

PRUs and EOTAS must secure learning and teaching in the Health and Well-being Area of Learning and Experience and in the other Areas as far as that is appropriate to the individual learner.

#### Statements of what matters

The Welsh Ministers will be required to issue a code setting out the statements of what matters. All the elements set out in the statements of what matters code must be covered in each school and funded non-maintained settings' curriculum.

#### Mandatory curriculum elements

The following will be mandatory curriculum elements.

- Religion, values and ethics.
- Relationships and sexuality education (RSE).
- Welsh.
- English.

The Welsh Ministers will have powers to add and remove mandatory curriculum elements.

In relation to English, headteachers and providers of funded non-maintained nursey education will have discretion over whether and to what extent they introduce English to learners up to the age of 7 for the purpose of supporting learners to gain fluency in Welsh.

#### Mandatory cross-curricular skills

Literacy, numeracy and digital competence will be mandatory cross-curricular skills and must be embedded in any adopted curriculum.

The Welsh Ministers will have powers to add and remove mandatory cross-curricular skills.

PRUs will be required to secure learning and teaching in the mandatory crosscurricular skills. Persons responsible for providing EOTAS will be required to secure learning in relation to the mandatory cross-curricular skills in so far as that is appropriate to the individual learner.

#### **Progression code**

The Welsh Ministers will be required to issue a progression code setting out the way in which progression must be reflected in an adopted curriculum. A school's curriculum will need to reflect the principles of progression set out in the code. The code will be made up of the principles of progression which have been developed by the CAMAU project through engagement with practitioners and, for now, can be found within the area of learning and experience and 'Designing your curriculum' sections of this guidance.

Issuing a progression code with mandatory elements will ensure there is consistency in the approach to progression in school curricula.

It will also support PRUs and providers of EOTAS in considering the appropriate curriculum for each of their learners.

#### Proposed key legislative requirements for schools

Schools must design, adopt and implement a curriculum that:

- enables learners to develop in the way described in the four purposes
- is broad and balanced
- is suitable for learners of differing ages, abilities and aptitudes
- provides for appropriate progression for learners and includes a range of provision to ensure this.

A school curriculum must:

- contain the six areas of learning and experience
- encompass the statements of what matters (as set out in the statements of what matters code)
- reflect the principles of progression set out in the progression code
- include the mandatory curriculum elements
- encompass the mandatory cross-curricular skills.

In addition to the above, we are proposing the age specific requirements below.

For learners up to age 7:

- the headteacher will have the discretion to decide that English does not form part of the school's curriculum in order to enable learners to gain fluency in Welsh
- all schools must set out in their published summary of their curriculum their approach to teaching English and Welsh up to age 7.

For learners aged 14 to 16, a school must design a curriculum so that, in addition to the mandatory curriculum elements and mandatory cross-curricular skills, it provides:

- choice for learners in the other learning they will undertake, but in such a way that ensures all learners still undertake some learning in each Area
- include other elements which the school requires all learners (or some groups of learners) to undertake.

#### Additionally:

- the Welsh Ministers may make regulations which specify additional requirements a curriculum must meet for the 14 to 16 age range in relation to:
  - courses of study and/or other learning
  - a minimum number of courses of study that a learner are entitled to undertake.

#### Additional requirements

Schools must publish a summary of their adopted curriculum and keep their curriculum under review.

The headteacher must implement their school's adopted curriculum in a way which:

- enables learners to progress in the way described in the <u>four purposes</u>
- is suitable for learners of different ages, abilities and aptitudes
- offers appropriate progression for those learners.

The governing body must exercise its functions with a view to ensuring the curriculum is implemented in that way.

Schools must ensure their curriculum is supported by assessment arrangements which assess the:

- progress made by learners in relation to the relevant curriculum
- next steps in learners' progression and the learning and teaching needed to make that progress.

Welsh Ministers will also make regulations in relation to the following key processes needed for effective learner progression.

- Ensuring a shared understanding of progression.
- Communicating and engaging with parents and carers.
- Transition along the 3 to 16 continuum.

If the Bill is passed, schools will be required to have regard to guidance issued as part of the Framework when designing, adopting and implementing their curriculum and assessment arrangements.

# Proposed key legislative requirements for funded non-maintained nursery education

Funded non-maintained nursery settings will be required to adopt a curriculum for their learners.

The Welsh Ministers will be under a duty to design a curriculum for these settings. The Welsh Ministers will make this curriculum available in 2021 and will engage the sector in its development. The Welsh Ministers will be required to keep this curriculum under review and make available any future revisions. Settings can adopt the Welsh Ministers' designed curriculum, design their own, or work with others to design a curriculum.

Any adopted curriculum for a funded non-maintained nursery setting, including the one produced by the Welsh Ministers, must meet the following requirements.

It must:

- enable learners to develop in the way described in the four purposes
- be broad and balanced
- be suitable for learners of differing ages, abilities and aptitudes
- provide for appropriate progression for learners and include a range of provision to ensure this (linked to ages, abilities and aptitudes).

The adopted curriculum must also:

- cover the six areas of learning and experience
- encompass the statements of what matters (as set out in the statements of what matters code)
- reflect the principles of progression set out in the progression code
- include the mandatory curriculum elements
- encompass the mandatory cross-curricular skills.

A provider of funded non-maintained nursery education will have discretion to decide that English does not form part of the curriculum in order to enable learners to gain fluency in Welsh. The published summary of their curriculum must set out their approach to teaching English and Welsh.

A provider of funded non-maintained nursery education must publish a summary of their adopted curriculum and keep their curriculum under review.

A provider of funded non-maintained nursery settings must implement their adopted curriculum so that it:

- enables learners to progress in the way described in the four purposes
- is suitable for learners of different ages, abilities and aptitudes and offers appropriate progression for those learners.

A provider of funded nursery education must ensure their curriculum is supported by assessment arrangements which assess the:

- progress made by learners in relation to the relevant curriculum
- next steps in learners' progression and the learning and teaching needed to make that progress.

If the Bill is passed, funded non-maintained nursery settings will be required to have regard to guidance issued as part of the Framework when designing (where relevant), adopting and implementing their curriculum and assessment arrangements.

# Proposed legislative requirements: pupil referral units (PRUs) and education otherwise than at school (EOTAS)

Our intention is to put in place a legislative framework which requires the following.

PRUs will be required to:

- provide learning which enables learners to progress in relation to the <u>four</u> <u>purposes</u>, is suitable for learners' ages, abilities and aptitudes, is broad and balanced, and offers appropriate progression. It must also include learning in relation to the <u>cross-curricular skills</u>, <u>relationships and sexuality education</u> (<u>RSE</u>) and the <u>Health and Well-being Area of Learning and Experience</u>
- have regard to the other components of the Framework, which includes the other areas of learning and experience (Areas) and the <u>mandatory curriculum</u> <u>components</u>, and secure provision in relation to them so far as that would appropriate for the individual learner.

Where local authorities arrange EOTAS for learners, they must ensure that the arrangements:

- secure provision which furthers the learners' progress towards the four purposes and is suitable for the learners' ages, abilities and aptitudes, is broad and balanced and offers appropriate progression
- secure, as far as appropriate for the individual learner, learning in relation to the cross-curricular skills, <u>RSE</u> and the <u>Health and Well-being Area of Learning and</u> <u>Experience</u>
- have regard to the other curriculum components, which include the areas of learning and experience and the <u>mandatory curriculum components</u>, and secure provision in relation to them so far as that would appropriate for the individual learner.

A PRU and a provider of EOTAS must ensure they put in place assessment arrangements which assess the:

- progress made by learners in relation to the curriculum which has been devised for that learner
- next steps in their progression and the learning and teaching needed to make that progress.

#### Proposed legislative requirements: curriculum disapplication

We propose enabling settings and schools to dis-apply a curriculum in certain circumstances, and to allow temporary exceptions for individual learners. These will be broadly in line with the approach in the current curriculum. If the Bill is passed, further detail will be provided as part of the updating of the guidance in 2021.

# Proposed legislative requirements for the Welsh Ministers and plans for guidance

The Welsh Ministers will have functions to make subordinate legislation and mandatory codes in the following main areas (this list is not exhaustive).

- The what matters statement (the proposed contents of which is set out in the statements of what matters).
- The progression code (the proposed contents of which are set out in the principles of progression).
- Regulations specifying additional requirements in relation to the curriculum for 14 to 16-year-olds.
- Regulations specifying how a curriculum is adopted and by when.

The Welsh Ministers plan to issue guidance to help schools and other settings in meeting the curriculum requirements and to make preparations while the Bill is being considered by the Senedd. This includes:

- Curriculum for Wales guidance for curriculum design and implementation (primary audience schools)
- assessment guidance
- the religion, values and ethics framework
- relationships and sexuality education guidance
- Welsh Ministers' curriculum for funded non-maintained nursery settings
- guidance to support PRUs and EOTAS providers to enable their learners to make progress towards the <u>four purposes</u> and meet the new requirements placed on them in the legislation.

Once the Bill has received Royal Assent, these will be issued as statutory guidance to support curriculum design implementation.

#### Wider requirements

There are a range of legislative requirements which settings and schools may need to consider or have regard to when managing their organisations. This section is not intended to detail these, but provide a signpost to those that have curriculum and assessment implications.

#### Well-being of Future Generations (Wales) Act 2015

The <u>Well-being of Future Generations (Wales) Act 2015</u> does not place specific duties on schools. However it does require local and national government (alongside other public bodies) to carry out sustainable development. This means that they must work to improve the economic, social, environmental and cultural well-being of Wales. This requires the Welsh Ministers and local authorities, among others, to set objectives designed to maximise their contribution to achieving each of the seven wellbeing goals and to take all reasonable steps in exercising its functions to meet those goals.

The Act also requires them to apply the sustainable development principle which includes adopting ways of working which will help to further sustainable development.

One of the Welsh Ministers' well-being objectives is: 'supporting young people to make the most of their potential.' Our approach to curriculum reform contributes to achieving that objective and, through that, maximising our contribution to the well-being goals. It also reflects the sustainable development principle and the ways of working.

We encourage schools, funded non-maintained nursery settings, PRUs and providers of EOTAS to consider how they can embed the ways of working and contribute towards the well-being goals in the way they go about designing, adopting and implementing their curriculum and engaging learners, parents/carers and their wider communities, businesses and partners in that process.

#### United Nations Convention on the Rights of the Child

Human rights are the freedoms and protections to which all people are entitled. Learners have specific human rights enshrined by the <u>United Nations Convention on</u> the Rights of the Child (UNCRC).

In designing, adopting or implementing a curriculum, we encourage schools, funded non-maintained nursery settings, PRUs and providers of EOTAS to incorporate opportunities for learners to:

- learn about human rights: the acquisition of knowledge and skills about human rights, and the sources of those rights
- learn through human rights: the development of values, attitudes and behaviours that reflect human rights values
- learn for human rights: the motivation of social action and empowerment of active citizenship to advance respect for the rights of all.

#### Additional Learning Needs and Education Tribunal (Wales) Act 2018

The Additional Learning Needs and Education Tribunal (Wales) Act 2018 creates a legislative framework to improve the planning and delivery of additional learning provision, through a person-centred approach to identifying needs early, putting in place effective support and monitoring, and adapting interventions to ensure they deliver desired outcomes.

The legal framework established by this Act will play a crucial role in enabling the curriculum to deliver strong and inclusive schools committed to excellence, equity and well-being.

The Framework seeks to allow for a broadening of learning, ensuring that all learners with <u>additional learning needs (ALN)</u> are supported to overcome barriers to learning and achieve their full potential.

Both the ALN system and the Framework are designed to deliver an inclusive and equitable education system in Wales. The provisions of the Act give life to this principle by placing a duty on local authorities to ensure that, wherever feasible, children and young people are supported to participate fully in mainstream education.

# **Designing your curriculum**

# Introduction

The Curriculum for Wales Framework (Framework) is a clear statement of what we see as important in a broad and balanced education. At its heart is our aspiration for every child and young person in Wales, as defined by the <u>four purposes</u> of curriculum. To realise this vision, <u>schools</u> must design, adopt and implement a curriculum which must fulfil the <u>curriculum requirements</u> set out in legislation and provide the learning it defines. To support schools, this guidance sets out a clear approach to inform curriculum decision-making.

The Framework gives every school in Wales the opportunity to design their own curriculum within a national approach that ensures a level of consistency. It encourages schools to build their own vision for their learners within the context of the four purposes and the learning defined at a national level. It provides the space for practitioners to be creative and to develop meaningful learning through a range of experiences and contexts that meet the needs of their learners.

When designing and implementing your curriculum, you should consider the following key questions. How will your curriculum:

- enable your learners to realise the four purposes and equip them for ongoing learning, work and life?
- build high expectations and enable all learners to achieve their full potential?
- offer a broad and balanced education, which enables your learners to make links between the different areas of learning and experience (Areas) and apply their learning to new situations and to more complex issues?
- support progression along a continuum of learning and how are you working with others to ensure there is alignment between different points of transition within the 3 to 16 continuum?
- support your learners' health and well-being, including their mental health and well-being?
- Support your learners' development of knowledge that is the foundation of being an informed citizen?
- recognise your learners' identity, language(s), ability and background and the different support they may need given their particular circumstances?
- reflect the diversity of perspectives, values and identities which shape your locality and Wales and develop understanding of the wider world?
- build in co-construction with learners, their families and the wider community?
- enable your learners to make sense of growing up in contemporary Wales and of issues which will be important in the future, including well-being, sustainable development and citizenship?
- support your learners to critically engage with a range of information and to assess its value and validity?
- enable your learners to develop an understanding of their rights and the rights of others?

'Designing your curriculum' has been developed to support you to engage with these questions in your school. It covers the important principles and considerations that should inform that process and provides guidance on developing:

- a vision for curriculum in a school
- a curriculum to make that vision a reality.

It also includes guidance on how to select curriculum content and assess learners to support their progression. Like the rest of this guidance, it is primarily for schools but will also be of use to other educational settings.

The statements of what matters, principles of progression and the descriptions of learning articulate the essence of what should underpin learning and provide the same high expectations for all learners.

Learners will have a range of needs and backgrounds, thus the Framework offers schools and practitioners the agency to choose the specific experiences, knowledge and skills, as well as the specific topics, activities and contexts that will best support learning within the Framework. This flexibility also allows schools to provide different support to different learners to meet those expectations and to tackle different gaps in attainment. This freedom of choice should be underpinned by a robust, evidence-based process of curriculum design, where the aim is always to help learners to realise the four purposes.

# Developing a vision for curriculum design

In reflecting on the questions posed in the introduction, schools and practitioners should develop a vision for their curriculum. This will require schools and practitioners to consider the following.

- What should we teach and why?
- How should we teach it?
- How will this support our learners to realise the four purposes?

This should be an ongoing conversation for the whole school and beyond, engaging with parents/carers and the wider community, including business, academia and public services. It should be informed by the school's values and ethos, as well as by its location and surroundings. However, it should retain an approach that is consistent with the learning set out in national guidance.

It should also consider, as an intrinsic part of curriculum design, how assessment will support this vision for their curriculum and the learning it will support. It should provide the rationale which schools return to in making sense of what experiences, knowledge and skills will help learners to develop and why.

Schools and practitioners should have a vision to develop a curriculum which:

- contributes to learners' realisation of the <u>four purposes</u> and acquisition of the integral skills which underpin them
- supports the development of their learners' sense of identity in Wales
- is broad and balanced
- is appropriate for their learners, with regards to their age, ability and aptitude
- enables appropriate progression for all learners along the continuum of learning
- incorporates opportunities for the application of mandatory cross-curricular skills
- incorporates assessment for learners' progression
- draws on learner voice and responds to learners' needs, experiences and input
- fulfils curriculum requirements.

#### Curriculum design and the four purposes

The <u>four purposes</u> should be the starting point and aspiration for schools' curriculum design. Ultimately, the aim of a school's curriculum is to support its learners to become:

- ambitious, capable learners, ready to learn throughout their lives
- enterprising, creative contributors, ready to play a full part in life and work
- ethical, informed citizens of Wales and the world
- healthy, confident individuals, ready to lead fulfilling lives as valued members of society.

All our children and young people will be supported to develop as: **ambitious, capable learners who:** 

- set themselves high standards and seek and enjoy challenge
- are building up a body of knowledge and have the skills to connect and apply that knowledge in different contexts
- are questioning and enjoy solving problems
- can communicate effectively in different forms and settings, using both Welsh and English
- can explain the ideas and concepts they are learning about
- can use number effectively in different contexts
- understand how to interpret data and apply mathematical concepts
- use digital technologies creatively to communicate, find and analyse information
- undertake research and evaluate critically what they find

#### and are ready to learn throughout their lives

#### enterprising, creative contributors who:

- connect and apply their knowledge and skills to create ideas and products
- think creatively to reframe and solve problems
- identify and grasp opportunities
- take measured risks
- lead and play different roles in teams effectively and responsibly
- express ideas and emotions through different media
- give of their energy and skills so that other people will benefit

#### and are ready to play a full part in life and work

#### ethical, informed citizens who:

- find, evaluate and use evidence in forming views
- engage with contemporary issues based upon their knowledge and values
- understand and exercise their human and democratic responsibilities and rights
- understand and consider the impact of their actions when making choices and acting
- are knowledgeable about their culture, community, society and the world, now and in the past
- respect the needs and rights of others, as a member of a diverse society
- show their commitment to the sustainability of the planet

#### and are ready to be citizens of Wales and the world

#### healthy, confident individuals who:

- have secure values and are establishing their spiritual and ethical beliefs
- are building their mental and emotional well-being by developing confidence, resilience and empathy
- apply knowledge about the impact of diet and exercise on physical and mental health in their daily lives
- know how to find the information and support to keep safe and well
- take part in physical activity
- take measured decisions about lifestyle and manage risk
- have the confidence to participate in performance
- form positive relationships based upon trust and mutual respect
- face and overcome challenge
- have the skills and knowledge to manage everyday life as independently as they can

#### and are ready to lead fulfilling lives as valued members of society.

In developing their vision for their curriculum, schools and practitioners should consider what the four purposes mean for their learners and how their curriculum will support their learners to realise them. Their vision – and the four purposes more broadly – should then guide the process of curriculum and assessment design. This will include developing their approach to curriculum design decisions across the whole school.

As schools develop their vision to support their learners to realise the four purposes, learner voice should be central to this. The input of learners should be an important consideration throughout the design process.

#### Skills integral to the four purposes

The <u>four purposes</u> are also underpinned by integral skills which should be developed within a wide range of learning and teaching. At the heart of these skills is the importance of learners recognising, using and creating different types of value. In this context, value means worth and importance in a range of contexts, including financial, cultural, social and learning value.

These skills are noted below.

#### **Creativity and innovation**

Learners should be given space to be curious and inquisitive, and to generate many ideas. They should be supported to link and connect disparate experiences, knowledge and skills, and see, explore and justify alternative solutions. They should be able to identify opportunities and communicate their strategies. This should support learners to create different types of value.

#### Critical thinking and problem-solving

Learners should be supported to ask meaningful questions, and to evaluate information, evidence and situations. They should be able to analyse and justify possible solutions, recognising potential issues and problems. Learners should become objective in their decision-making, identifying and developing arguments. They should be able to propose solutions which generate different types of value.

#### **Personal effectiveness**

Learners should develop emotional intelligence and awareness, becoming confident and independent. They should have opportunities to lead debate and discussions, becoming aware of the social, cultural, ethical and legal implications of their arguments. They should be able to evaluate their learning and mistakes, identifying areas for development. They should become responsible and reliable, being able to identify and recognise different types of value and then use that value.

#### Planning and organising

Where developmentally appropriate, learners should be able to set goals, make decisions and monitor interim results. They should be able to reflect and adapt, as well as manage time, people and resources. They should be able to check for accuracy and be able create different types of value.

The development of these skills allows learners to work across disciplines, providing them with opportunities for both synthesis and analysis. There is particular potential for innovation in making and using connections between different disciplines and Areas.

When developing these skills, learners should:

- develop an appreciation of sustainable development and the challenges facing humanity
- develop awareness of emerging technological advances
- be supported and challenged so that they are prepared to confidently meet the demands of working in uncertain situations, as changing local, national and global contexts result in new challenges and opportunities for success
- be afforded the space to generate creative ideas and to critically evaluate alternatives in an ever-changing world, flexibility and the ability to develop more ideas will enable learners to consider a wider range of alternative solutions when things change
- build their resilience and develop strategies which will help them manage their well-being – they should be encountering experiences where they can respond positively in the face of challenge, uncertainty or failure
- learn to work effectively with others, valuing the different contributions they and others make – they should also begin to recognise the limitations of their own work and those of others as they build an understanding of how different people play different roles within a team.

#### **Cross-curricular skills**

The mandatory cross-curricular skills of literacy, numeracy and digital competence are essential to all learning and the ability to unlock knowledge. They enable learners to access the breadth of a school's curriculum and the wealth of opportunities it offers, equipping them with the lifelong skills to realise the <u>four purposes</u>. These are skills that can be transferred to the world of work, enabling learners to adapt and thrive in the modern world. Learners need to be adaptable, capable of learning new skills throughout life and equipped to cope with new life scenarios.

Schools must design and deliver a curriculum which enables learners to develop competence and capability in these skills and, where there are opportunities, to extend and apply them across all Areas. Developing these skills is therefore a consideration for all practitioners.

Learners must be given opportunities across the curriculum to:

- develop listening, reading, speaking and writing skills
- be able to use numbers and solve problems in real-life situations
- be confident users of a range of technologies to help them function and communicate effectively and make sense of the world.

Rather than planning for these skills separately, the whole school should be involved and engaged to embed these skills across the curriculum. It will, therefore, be the responsibility of all practitioners across all Areas to develop and reinforce these skills across the curriculum, and not just for specialist practitioners of mathematics, language and computing.

#### The cross-curricular skills frameworks

Refined versions of the <u>National Literacy and Numeracy Framework</u> and the <u>Digital</u> <u>Competence Framework</u> sit alongside and align with this guidance. They provide supporting guidance for all practitioners, across all Areas, to ensure opportunities for the development of these mandatory skills. They present a common approach supporting schools and practitioners to ensure learners have frequent opportunities to develop, extend and apply these cross-curricular skills.

#### **Progression**

Progression in learning is a process of increasing sophistication, rather than covering a growing body of content. This is individual to each learner. It requires space for diversion, reinforcement and reflection as a learner's thinking develops over time to new levels.

While there may be particular threshold concepts that represent a significant shift in a learner's understanding, these are not linked to specific ages, nor will they happen at the same time in different areas for individual learners.

Learners with additional learning needs (ALN) will progress at a rate individual to the learner and this may not correlate with the broad two to three year progression step. Pace of progression should be evaluated by the professionals working with learners with ALN.

Supporting learners to make progress is a fundamental driver of the Framework. This is reflected in the statements of what matters, the descriptions of learning for each of these statements and is also the primary purpose of assessment. Understanding how learners progress is critical to learning and teaching and should inform curriculum design, classroom planning and assessment.

The principles of progression below articulate the national expectations for learners' progress throughout the continuum of learning. These principles will be further developed to support practitioners and will form part of the progression code which will be a statutory part of the Framework.

These principles of progression give practitioners a higher level understanding of progression.

They:

- explain what it means for learners to make progress, the nature of that progression and the principles underpinning it
- describe what progression means and how learners make progress throughout the learning continuum rather than viewing it as movement between atomised statements
- apply across the continuum of learning and so do not refer to specific progression steps.

As well as the overarching text below, these principles are also described in the context of each area of learning and experience [Area/Areas]. They describe how learners make progress within each Area throughout their learning journey. These are distinct from descriptions of learning which provide more specific reference points of how progression should look as learners work towards the statements of what matters. Together, practitioners can use these two elements to understand what it means for learners to progress, and use this to inform learning, teaching and assessment.

A number of conceptual models of progression exist. No single model has been employed in the creation of the descriptions of learning. Instead, practitioners should be mindful of a variety of ways in which learners may progress at different points in the learning journey, and over different lengths of time, as they develop their curriculum.

#### Principles of progression

Five principles of progression underpin progression across all Areas. The principles are as follows.

#### • Increasing breadth and depth of knowledge

Learners need to acquire both breadth and depth of knowledge. As learners progress, they develop an increasingly sophisticated understanding of concepts that underpin different statements of what matters. They see the relationships between these and use them to further shape and make sense of knowledge and make links across the whole curriculum. This consolidates their understanding of concepts.

#### • Deepening understanding of the ideas and disciplines within the Areas

Holistic approaches are particularly important to learning in early steps as learners engage with the world around them. Learners should become increasingly aware of ways in which ideas and approaches can be coherently grouped and organised. As they progress they need to experience and understand disciplinary learning in each of the Areas and see these in the context of the statements of what matters and the four purposes.

#### • Refinement and growing sophistication in the use and application of skills

Learners need to develop a range of skills including: physical, communication, cognitive and Area specific skills. In the early stages of learning, this range of skills includes focus on developing gross and fine motor; communicative and social skills. They also develop intellectual skills in applying what they have learned. As learners progress, they demonstrate more refined application of existing skills, and will experience opportunities to develop new, more specific and more sophisticated skills.

Over time, learners become able to effectively organise a growing number of increasingly sophisticated ideas, to apply understanding in various contexts and to communicate their thoughts effectively, using a range of methods, resources or equipment appropriate to their purpose and audience.

#### • Making connections and transferring learning into new contexts

Learners should make connections with increasing independence; across learning within an Area, between Areas, and with their experiences outside of school. Over time these connections will be increasingly sophisticated, explained and justified by learners. They should be able to apply their learning in more unfamiliar and challenging contexts.

#### • Increasing effectiveness

As learners progress, they should become increasingly effective. This includes increasingly successful approaches to self-evaluation, identification of their next steps in learning and more effective means of self-regulation. They become increasingly able to seek appropriate support and to identify sources of that support. They ask more sophisticated questions and find and evaluate answers from a range of sources. They become increasingly effective at learning in a social and work-related context.

#### Designing a curriculum in Wales and for Wales

The Framework reflects Wales, its cultural heritage and diversity, its languages and the values, histories and traditions of its communities and all of its people.

Instilling learners with passion and pride in themselves, their communities and their country is central to the <u>four purposes</u>. Learners should be grounded in an understanding of the identities, landscapes and histories that come together to form their *cynefin*. This will not only allow them to develop a strong sense of their own identity and well-being, but to develop an understanding of others' identities and make connections with people, places and histories elsewhere in Wales and across the world.

It is important for this to be inclusive and to draw on the experiences, perspectives and cultural heritage of contemporary Wales. Confidence in their identities helps learners appreciate the contribution they and others can make within their different communities and to develop and explore their responses to local, national and global matters.

It also helps them to explore, make connections and develop understanding within a diverse society. This also recognises that Wales, like any other society, is not a uniform entity, but encompasses a range of values, perspectives, cultures and histories: that includes everybody who lives in Wales. This *cynefin* is not simply local but provides a foundation for a national and international citizenship. Further guidance on developing the Welsh context in learning is provided in the section on local, national and international contexts.

The Framework also reflects our bilingual nation. All learners should have appropriate pathways for learning Welsh and English to enable them to develop the confidence to use both languages in everyday life. Opportunities to use Welsh within and beyond the classroom (including on digital platforms) support learners to use Welsh confidently and appreciate its usefulness to communication in a bilingual Wales. Being (at the least) bilingual is not only a communication skill. Access to both languages helps unlock Wales's rich and unique literatures, geography, democracy, history and culture. To have knowledge, experience and an understanding of these supports learners to be active and successful citizens in contemporary Wales.

Developing learners' comfort and ability to work in two languages also provides a strong foundation for learners to engage with different languages they encounter and develop learning in other languages as they progress. Schools should ensure rich language environments for all learners and reading, listening, speaking and writing across the curriculum should be developmentally appropriate.

The <u>Siarter laith (Welsh Language Charter)</u> is a national framework for all settings and schools to provide a holistic basis for planning experiences across the curriculum in order to increase learners' use of Welsh and develop their confidence in the language from an early age.

#### Assessment

Assessment is an integral part of the learning process, with practitioners working with learners to help identify their strengths, areas for development and next steps in learning. When designing assessment arrangements as part of a school curriculum, the following should be guiding principles.

- The purpose of assessment is to support the progression of each individual learner in relation to the 3 to 16 continuum.
- Learners are at the heart of assessment and should be supported to become active participants in the learning process.
- Assessment is an ongoing process which is indistinguishable from learning and teaching.
- A shared understanding of progression, developed through professional dialogue, is integral to curriculum design and improving learning and teaching.
- Learning across the breadth of the curriculum should draw on a wide range of assessment approaches, building a holistic picture of the learner's development.
- Engagement between the learners, their parents/carers and practitioners is essential for progression and well-being.

The overarching purpose of assessment is to support every learner to make progress. When planning and delivering learning experiences, schools and practitioners should be clear about the specific role of each assessment being undertaken and what the understanding gained from assessment will be used for and why. In this respect, there are three main roles played by assessment in supporting learner progression.

• Supporting individual learners on an ongoing, day to day basis

Assessment should focus on identifying each individual learner's strengths, achievements, areas for improvement and, if relevant, any barriers to learning. This understanding should be used by the practitioner, in discussion with the learner, to ascertain the next steps required to move learning forward, including any additional challenge or support required. This should be achieved by embedding assessment into practice in a way that engages the learner and makes it indistinguishable from learning and teaching. This allows the practitioner to respond to the individual needs of the full range of learners within their classroom on an ongoing basis.

#### Identifying, capturing and reflecting on individual learner progress over time

Assessment should support practitioners in identifying the progress being made by an individual learner, recording this where appropriate, to understand their journey over different periods of time and in a variety of ways, in order to ensure there is progression. This includes developing an understanding of **how** a learner has learned, as well as **what** they have learned and are able to demonstrate. Reflecting on a learner's progress over time should enable practitioners to provide feedback and help plan their future learning, including any interventions, additional support or challenge which may be required. This should include both immediate next steps and longer-term objectives and goals that the learner should work towards to help keep them moving forward in their learning. It can also be used as a basis for communicating and engaging with parents/carers.

• Understanding group progress in order to reflect on practice Assessment should also enable practitioners and leaders within the school to understand whether different groups of learners are making expected progress. This should be used to identify strengths and areas for improvement in both the school curriculum and daily practice, including consideration of how the needs of learners as individuals have been met.

For further information, see <u>Supporting learner progression: Assessment guidance</u>.

#### A curriculum accessible to all

A school's curriculum should raise the aspirations for all learners. It should consider how all learners will be supported to realise the <u>four purposes</u> and to progress. This is essential for learners to play an active part in their community and wider society, and to thrive in an increasingly complex world.

Schools should be aware of the needs and circumstances of all their learners when designing their own curriculum, considering equity of opportunity when putting into place support and interventions or making reasonable adjustments.

This guidance has been developed to be inclusive of all learners, including those with additional learning needs (ALN). It is also intended to support schools to design inclusive school curricula. Learners will progress along the same continuum of learning within each Area from ages 3 to 16. However, the pace at which they progress along the continuum may differ – allowing for a diversion, repetition and reflection as each learner's thinking, knowledge and skills develop over time. Schools and practitioners have discretion when planning for progression, giving due regard to all learners in their settings/schools.

Key to this is consideration of learners with ALN and this guidance has been developed with ALN practitioners and specialist professionals. It should therefore

support the planning for progression for learners with ALN. Where this guidance makes reference to specific verbs such as 'talk', 'move' or 'create', these should be interpreted according to the needs of the learners.

Schools should acknowledge the importance of professional development for staff with responsibility for and who work with learners with ALN. There should be opportunities for collaboration between schools, relevant agencies and wider professionals when designing the school curriculum.

A school's curriculum should also provide stretch and challenge for more able and talented learners and enable them to progress along the continuum of learning at a pace appropriate to them.

A critical part of raising aspirations for all learners and addressing different gaps in attainment is ensuring that all learners are supported to realise the <u>four purposes</u> through a broad and balanced curriculum with the national framework. This includes gaps influenced by different socio-economic backgrounds but may be far wider. This should be supported by provision which responds to the specific needs and circumstances of learners. In particular, this should consider what specific experiences, knowledge and skills learners may need that they would otherwise not have opportunity to benefit from. Understanding group progress is also an important focus for schools to ensure that their curriculum raises standards and helps raise achievement for all. It is not about external reporting, but is about schools and practitioners understanding what they need to know about their learners, and which other agencies they need to work with, in order for them all to maximise their potential and identifying specific challenge and support which particular groups might need.

# Your curriculum design

#### Principles of curriculum design

The vision for curriculum that schools have developed should then guide curriculum design.

Based on the curriculum requirements set out in legislation, their curriculum must:

- enable learners to make progress towards the four purposes
- be broad and balanced
- be suitable for learners of different ages, abilities and aptitudes
- provide for appropriate learner progression
- include all six Areas
- cover every statement of what matters
- include the mandatory curriculum components of religion, values and ethics, relationships and sexuality education, Welsh and English
- embed the mandatory cross-curricular skills
- incorporate a range of assessment approaches which support learner progression
- provide choice for learners in what they study at 14 to 16 but still ensure every learner has learning in each Area.

This guidance should also:

- provide a breadth of learning, drawing together a range of experiences, knowledge and skills across a range of contexts, topics and activities, making links across Areas
- provide for, over time, an increasing depth and sophistication of learning
- be developmentally appropriate and drive learners' progression
- incorporate opportunities for learning and consideration of cross-cutting elements, which:
  - allow learners to consider local, national and international contexts
  - develop understanding of careers and work-related experiences
  - develop understanding of human rights education and diversity.

#### Using the guidance to select curriculum content

Each element of the guidance within the Areas has been developed to support the selection of curriculum content. These are:

- statements of what matters
- descriptions of learning
- principles of progression.

#### Statements of what matters

A school's curriculum must cover all of the statements of what matters from age 3 to 16, providing engagement with their key concepts in a developmentally appropriate way. These statements are therefore an essential part of schools' curriculum design. Schools and practitioners must use the statements of what matters to guide the development of curriculum content, using them to:

- select experiences, knowledge and skills the statements of what matters sum up the 'big ideas' or key principles of each Area and content selected should enable learners to develop understanding of the statements of what matters
- understand how learning should support learners' progression learning should contribute to an increasingly sophisticated understanding and application of the statements of what matters
- allow learners to explore topics and activities through different lenses the same subject matter can and should be considered by learners through different statements allowing learners to experience a topic holistically, helping them to make stronger links across content, disciplines and Areas
- help learners to make sense of a range of experiences, knowledge and skills, focused around the fundamentals of each Area – using the statements of what matters to underpin learning helps learners develop a coherent understanding of a range of information, making connections between different learning, rather than accumulating isolated facts and activities.

Curriculum content must link back to the statements of what matters. This supports learners to make sense of everything they learn throughout the continuum of learning. Practitioners should use a range of contexts, perspectives and topics to contribute towards learning within a statement. This enables learners to develop a coherent framework of learning and an increasingly sophisticated understanding and application of those ideas or principles as they progress.

#### **Descriptions of learning**

Descriptions of learning provide guidance on how learners should progress within each statement of what matters as they journey through the continuum of learning. These are arranged in five progression steps which provide reference points for the pace of that progression. These expectations are expressed from the learner's perspective and are framed broadly so that they can sustain learning over a series of years. They are not designed as stand-alone tasks, activities or assessment criteria. While the learning continuum is the same for each learner, the pace of progress through it may differ. As a result, the progression steps only broadly relate to age. They broadly correspond to expectations at ages 5, 8, 11, 14 and 16. Descriptions of learning are designed to sustain learning over a period of years and this gives practitioners scope to use them to select content that provides both breadth and depth of learning.

## • Breadth

Practitioners should use the descriptions of learning to bring together a broad range of experiences, knowledge and skills. They should be explored through a range of contexts, topics and activities selected in the process of curriculum design. This should also mean making links across Areas as appropriate.

# • Depth

Practitioners should support learners to engage with descriptions of learning in increasing depth and sophistication over a period of time. This should help learners to apply the descriptions of learning in increasingly challenging contexts and allow for diversion, reinforcement and reflection as their understanding and application of the key learning develops and becomes more sophisticated over time, provoking deep thinking, discussion and inquiry.

Where overlaps in learning exist, descriptions of learning are designed to be considered through a range of different disciplinary lenses and practitioners should seek to incorporate these disciplinary perspectives into learning. As learners progress, they should have greater opportunity to specialise and the disciplinary contexts for descriptions of learning should become increasingly apparent in curriculum design. In some Areas, disciplines also become more explicit in the descriptions of learning themselves towards the end of the continuum, as the essence of learning in an Area becomes more specialised.

## **Principles of progression**

Progression in learning should always be at the heart of curriculum design rather than starting with a theme and fitting the learning to it. In selecting curriculum content, schools and practitioners must use the principles of progression to inform their approach to progression. While descriptions of learning articulate how learners should make progress in learning around specific statements of what matters, the principles of progression articulate the broader principles of what progression means in the Area as a whole. As such, schools and practitioners must use these principles to inform all learning in supporting progression. When considering descriptions of learning or a specific context, topic or experience, the principles of progression help practitioners to understand how learners should progress with greater sophistication or depth. Practitioners should also recognise that learners will progress at different paces.

### The role of disciplines in learning

This guidance has been developed to support approaches which draw together different disciplines in curriculum design. This provides learners with a more coherent learning experience, as they seek to make meaningful connections between the different things they learn. In this respect, combining a range of statements of what matters in different Areas can allow learners to consider curriculum content from a range of perspectives and disciplines. The statements of what matters themselves, and where appropriate the descriptions of learning, have been designed to facilitate this kind of approach. This allows learners to link and reinforce their learning across different disciplines.

As learners progress, they should have greater opportunities to engage with different disciplines and to specialise within them, particularly when they reach the later progression steps. However, this should be a process of evolution, with learners gradually having greater opportunity to specialise. As learners progress, this process should be supported by discipline-specialist teaching, which, along with the multi-disciplinary approach to curriculum design, should prepare learners who seek to specialise further during learning post-16. This will require specialists to teach and specialists to design.

While learners should have opportunities to specialise, the curriculum must remain broad and balanced and each learner should continue to draw on learning from each Area throughout their time in compulsory education. Schools will be expected to enable all learners to access a range of courses of study and to take suitable qualifications at the end of compulsory education.

# Developing a methodology for designing your curriculum

# Cross-cutting themes for designing your curriculum

Schools and practitioners should have a methodology for designing a curriculum which incorporates, where appropriate, opportunities for learning and consideration of cross-cutting elements.

These should allow learners to:

- consider local, national and international contexts
- develop understanding of relationships and sexuality education, human rights education and diversity, and careers and work-related experiences.

### **Relationships and sexuality education**

Relationships and sexuality education (RSE) plays a vital role in enhancing learners' well-being and safety and will be mandatory. Children begin to learn about relationships long before they start school. As soon as they enter the social world they will be encountering and interacting with complex and often contradictory messages about gender, relationships and sexuality that will shape their day-to-day lives and imagined futures. These messages come from advertising, books, music, social media and television, and from family members, peers and communities. What children and young people are learning and experiencing can include misconceptions and sometimes challenge adult assumptions or expectations. Through RSE, learners should be supported to explore and discuss information and values about relationships and sexuality that they are already exposed to and often struggle to navigate for themselves.

Schools have an important role for prevention and protection, discussion and responding to learners' questions and needs. They have the potential to create safe and empowering environments that build upon learners' own formal and informal learning and experiences, offline and online. This enables learners to reflect and express their views and feelings on a range of RSE issues. Central to this is acknowledging, discussing and engaging with a diverse range of perspectives: locally, nationally and internationally.

Relationships and sexuality education aims to gradually empower learners to build the knowledge, skills and ethical values for understanding how relationships, sex, gender and sexuality shape their own and other people's lives. It seeks to support learners' rights to enjoy equitable, safe, healthy and fulfilling relationships throughout their lives. This includes the ability to recognise, understand and speak out about discrimination and violence and know how and where to seek support, advice and factual information on a range of RSE issues.

It is proposed that schools will have a duty to provide RSE. Further guidance will be published before 2022 to support this, including guidance on the topics and learning that support RSE and how each Area can contribute to these.

Relationships and sexuality education should include developmentally appropriate learning around the following thematic areas.

## • Rights and equity

Learners should develop an understanding of how rights related to sex, gender, sexuality and relationships contribute to the freedom, equity, dignity, well-being and safety of all people. Central to this learning should be an understanding of the opportunities and challenges people face in exercising their rights across the world.

## • Relationships

Learners should develop an understanding of how different types of safe, consensual, healthy and fulfilling relationships can be formed and maintained. Central to this learning should be recognising and understanding the diversity of relationships around the world, and over the life course.

# • Sex, gender and sexuality

Learners should develop an understanding of sex, gender and sexuality. This includes how biology, society and culture shape our sense of self and relationships with others. Central to this learning should be recognising the diversity of gender and sexual identity, expression, behaviour and representation, including LGBTQ+ diversity, and how social and cultural understandings of sex, gender and sexuality have changed over time and continue to evolve.

## • Bodies and body image

Learners should develop an understanding of the human body and how it changes over time, including people's feelings about their bodies, and their sexual and reproductive capacities and functions. Central to this learning is recognising the diversity of the human body, and how understanding of human bodies is shaped by society, the law, science and technology.

## • Sexual health and well-being

Learners should develop an understanding of the positive role of sexuality in human life and a gradual awareness of personal sexual health and well-being. Central to this learning is appreciating the different ways that people express sexuality across cultures and contexts, including myths about sexual health and well-being.

# • Violence, safety and support

Learners should develop an understanding of the social, emotional, physical and legal nature and impact of gender-based and sexual violence, including online. Central to this learning should be supporting learners to understand and manage change, conflict, risk and pressures of different kinds. Building learners' confidence to speak out and know how to seek advice and support is integral to RSE.

# Principles for embedding RSE in the curriculum

Learning should be underpinned by a collective whole-school approach so that the following principles will be supported, reinforced and embedded across the school and wider community. Learning should be:

- rights and gender-equity based so that learners can develop an understanding of how rights related to relationships, sex, gender and sexuality contribute to the freedom, equity, dignity, well-being and safety of all people
- empowering to enable practitioners to create an affirmative and transformative RSE curriculum that enhances learner voice and agency. This can be achieved by inviting learners to advance social justice for gender, sexual and relationship equity and well-being
- relevant and developmentally appropriate to ensure that all RSE provision recognises and responds to learners' own capacities and needs. It will not assume, but attune to and build upon learners' evolving knowledge and experience
- co-produced, offering learners, parents and carers the opportunity to discuss and engage with decisions about learning and teaching in RSE. Provision should also draw on specialist services and expertise, and engage with local communities. This should be mindful of the different perspectives and backgrounds within a local community
- creative so that RSE provision can benefit from how creative approaches have the potential to make ethical, safe and engaging spaces for learners to feel, think, question, embody and share their thoughts on sensitive topics
- holistic and provided across the curriculum because relationships and sexuality education is a broad, inter-disciplinary and complex area that includes biological, social, psychological, spiritual, ethical and cultural dimensions that evolve over the lifespan
- inclusive to ensure that all learners see themselves and each other in what they learn about RSE. Central here will be recognising and valuing diversity and difference across the domains of sex, gender, sexuality and relationships, and ensuring that RSE provision is inclusive of LGBTQ+ lives
- protective and preventative so that learners are supported to understand and cope with change, conflicts and pressure; the knowledge to recognise discrimination and violence; and the confidence to seek support and advice on equalities and equity, health and violence regarding relationships, sex, gender and sexuality. Crucial here will be working in partnership with specialist services and expertise.

# Human rights education and the United Nations Convention on the Rights of the Child (UNCRC)

Human rights are the freedoms and protections to which all people are entitled. The <u>UNCRC</u> was established to outline and safeguard every single human being's basic rights, irrespective of nationality, place of residence, sex, national or ethnic origin, colour, religion, language, sexual orientation or any other status. What is more, we are all equally entitled to our human rights without discrimination. These rights are all related to one another, dependent upon one another and indivisible from one another.

Children and young people have specific human rights guaranteed by the UNCRC. The Welsh Ministers have adopted the UNCRC as the basis of policy making with regards to children and young people. The principles of the UNCRC informed the development of the <u>four purposes</u>. Supporting learners to know their rights and respect those of others through a human rights education enables a curriculum driven by these purposes.

Human rights education should encourage inquiry, analysis, forming arguments, making decisions, cooperation, evaluation, and developing behaviours informed by values. Human rights education encompasses:

- learning about human rights understanding human rights, and the sources of those rights including the UNCRC
- learning through human rights the development of values, attitudes and behaviours that reflect human rights values
- learning for human rights the motivation of social action and empowerment of active citizenship to advance respect for the rights of all.

## Learning about human rights

Human rights education supports learners to be able to apply the concepts, principles and language of human rights to understand their own needs and relationships. Learners can also apply this understanding to the entitlements of others, both in their community and beyond, and to identify when their rights or the rights of others are threatened or denied.

## Learning through human rights

Embedding a <u>children's rights approach to education</u> means learners should be supported to experience a practical application of their rights, supported by critical understanding of the rationale for this experience. A key principle of this approach is the right of children and young people to participate meaningfully in decisions that affect their lives. Involving children and young people in decisions about learning should be at the heart of curriculum design.

## Learning for human rights

Human rights education encourages learners to critically examine their own attitudes and behaviours and enables learners to be ethically-informed citizens, who can be advocates for their rights and the rights of others. Learners should be empowered to take informed and ethical decisions to defend and advocate their rights and the rights of others.

# Diversity

Diversity here refers to recognising and celebrating the diverse nature of social groups and communities and to ensuring that the curriculum reflects that diversity and is responsive to the experiences of those groups and communities. At its most basic, it means being aware of the characteristics of others and treating others with compassion, empathy, understanding and equity, regardless of those characteristics. As learners progress, they should become increasingly aware of a range of specific characteristics which can define our identity, including sex, gender, race, religion, age, disability and sexuality.

Humans, by their very nature are social beings. They have diverse values, identities, behaviours and physical characteristics. The cohesion of any human society depends on how it manages that diversity. Valuing the different contributions and experiences of those in our social groups strengthens the connections between us and supports the well-being of all members of those groups. Sharing the experiences of others outside our social groups expands our horizons, adds to our perspectives and contributes to our shared sense of humanity. By feeling valued, we are empowered to make meaningful contributions to our societies.

School communities will reflect the diverse range of backgrounds and perspectives found in society. As learners grow, their social interactions are likely to become ever wider in an increasingly interconnected world. Creating a curriculum which recognises the diverse culture of their society enables learners to celebrate the diverse nature of all societies. This promotes equality, inclusion, social cohesion and a feeling of being valued.

In designing a curriculum, practitioners should incorporate opportunities for learners to:

- develop empathy and compassion for others
- celebrate diverse backgrounds, values and characteristics
- develop their own values and sense of identity
- develop understanding of people with different beliefs and perspectives
- challenge stereotypes.

Practitioners should also tell and listen to the stories of different groups, including minority groups, and enable all learners to see themselves and their experiences represented in the topics, experiences and knowledge developed through the curriculum.

### Careers and work-related experiences

Learning about careers and work-related experiences are fundamental to developing skills for work and life. This helps learners to understand the relationship between their learning and the world of work. Experiences should aim to open learners' eyes to the possibilities that lie ahead and should provide high-quality advice about skills and career pathways, raising the aspirations of learners who may not consider that some opportunities are actually available to them.

School's curricula should enable learners to gain experiences related to work and careers, developing knowledge of the breadth of opportunities available to them throughout their lives. This learning will help them make informed decisions about their career pathways. The <u>four purposes</u> and the integral skills which support them are central to preparing learners for careers and work. These support learners to be resilient, creative and ambitious, requiring them to solve problems, engage with different information and work independently. This will help prepare them to respond to the opportunities and challenges of a changing economic reality.

Learning about careers and work-related experiences should be explored through every Area. These skills are transferable, highly valued and sought after by employers.

Learning about careers and work-related experiences should include:

- knowledge about different career pathways and workplaces this should include an understanding of the factors that guide, shape and influence career prospects and development, and the skills needed to progress learners' career plans and development
- learning about and development of the skills to work towards careers and work pathways – this should include an awareness of individual skills, attributes and interests, and how they impact on career choices, along with an understanding of the consequences of those choices
- employment and enterprise knowledge, which can be applied when seeking, applying for and sustaining employment or self-employment
- knowledge and appreciation of local, national and international labour market trends
- experiences to stimulate interest in different careers and work and to apply their learning in practical ways, e.g. entrepreneurial activity requires the development of enhanced reflection skills and relates to practical activities such as business start-ups and venture-creation programmes
- opportunities to benefit from links with business and/or employers.

Schools and practitioners should ensure careers and work-related experiences:

- are explored from Progression step 1 onwards
- are inclusive, emphasising opportunities for all, challenging stereotypes and addressing underrepresentation in different careers
- are embedded authentically across learning
- include a range of traditional and emerging work opportunities, including startups and entrepreneurship
- incorporate the development of the integral skills
- provide meaningful experiences and opportunities to engage with employers and different workplaces.

Collaboration with individuals and employers provides learners with opportunities to learn about work, employment and the skills valued in the workplace. Learners can use the knowledge and skills gained from taking part in work-related experiences to develop successful enterprise activities. These can provide an authentic learning experience which helps them develop as enterprising, creative contributors, forming links with the world of work and raising their aspirations.

It is important for learners to be aware of all opportunities available to them post-16, and that they are all well prepared for progression to further learning. Learners should have opportunities to consider different options and information to broaden their horizons, excite their aspirations and support their decisions about their learning and career pathways post-16.

## Local, national and international contexts

The local, national and international contexts provide key perspectives for learners and are of particular importance in supporting learners to realise the <u>four purposes</u>. They help learners make sense of the skills and knowledge they are developing by making connections with surroundings, experiences and events they may be more familiar with. They also introduce learners to less familiar contexts, broadening their horizons, engaging with perspectives different from their own and appreciating wider challenges and issues. These contexts also help them make sense of their relationship with their communities, their national identity and the wider world. This supports learners to develop a citizenship which is multifaceted, reflecting on their roles and responsibilities within each context and recognising the diversity within each. While local, national and international contexts provide distinct contributions to learning, they are profoundly interconnected. Curriculum content can often be considered through each context and practitioners should seek to draw across these contexts and support learners to understand the clear, intrinsic links between them. These contexts provide an important opportunity for learners to understand and respond to different issues and challenges, including social, economic and environmental questions in working towards a sustainable and equitable future. The environment forms an important part of each of these contexts, with human impact transcending geographical and political boundaries. This includes the relationships between human activities and the local, national and international environment. Learners should have opportunities to respond to the issues and challenges that arise from these relationships, considering how they have shaped our past and present and how they may shape our future.

To understand Wales, learners should also develop an understanding of its relationship with and changing place within the United Kingdom and the stories and peoples of these islands: both now and in the past. Learners' understanding of Wales should also recognise how different perspectives, values and identities shape Wales, rather than presenting a simplistic characterisation of a uniform Welsh identity.

Practitioners' own understanding of the school's local area and awareness of the changing issues and challenges in each context will help them to be creative in embedding these contexts in learning and teaching.

When embedding local, national and international contexts, practitioners should look for opportunities to support learners to:

- develop learning through a range of places and events of significance
- make links with local communities and organisations
- learn about the contributions and experiences of different individuals that shape each context
- learn about cultural diversity, values, histories and traditions that shape each context
- understand different identities, histories, cultures, perspectives and values that shape communities and societies
- recognise and engage with factors, influences and impacts (including economic, social and environmental impacts) locally, nationally and internationally
- develop an authentic sense of cynefin, building knowledge of different cultures and histories, allowing them to develop a strong sense of individual identity and understanding how this is connected to and shaped by wider influences
- draw on the stories and distinctiveness of a school's local surroundings
- understand their role as citizens and the structures of government which affect them in each context
- explore, critically analyse and respond to contemporary issues and challenges affecting their lives and the lives of others through each context
- understand sustainable development, the challenges the environment and society face and how they can engage with and make a difference on these issues supporting sustainable citizenship
- understand contemporary Wales, providing opportunities to reflect, understand and analyse contemporary society and their engagement with it

- recognise Wales' diverse linguistic heritage and culture, and its connections with the rest of the world
- recognise how our languages unlock knowledge about our literature, geography, history and their links beyond Wales
- recognise the links between local, national and international contexts, understanding how they constantly influence each other
- use critical analysis in each context, recognising both positive and challenging aspects within each.

# Developing a methodology for curriculum design: Implementation and practical considerations

As it is implemented, a school's curriculum should:

- draw on a range of sound evidence, including disciplinary-specific expertise where appropriate, learning from professional inquiry, intelligence from research and local and national information
- be co-constructed, encouraging learners, parents, carers and the local community to understand and contribute to curriculum development; it should also draw on a wider range of experts and stakeholders who can contribute to learning
- be reflected upon and revised, based on understanding gained from all aspects of learning and teaching, and supported by professional inquiry
- be supported by effective pedagogy.

# Using evidence and expertise

Learning and teaching should be informed by sound evidence and expertise. This should include:

- disciplinary-specific expertise which will become increasingly relevant in developing a curriculum as learners progress; the guidance promotes interdisciplinary approaches but also recognises the importance that disciplinaryspecific expertise plays in that
- understanding from high-quality educational research and evidence
- relevant information about learners and their communities
- learning from professional inquiry
- evidence and expertise shared through local, cluster, regional and national networks
- partnership with further and higher education
- professional learning.

# **Co-construction**

## Working with other settings, schools and further education institutions

Working with other settings, schools and further education institutions provides important opportunities to share learning and develop joined-up experiences for learners across their learning journey. In particular collaboration across settings, schools and further education supports the following. • Developing a shared understanding of curriculum design (including assessment) and progression

To ensure equity for learners within a local area and across Wales, it is important that there is a shared understanding of the fundamentals of curriculum design, along with a shared understanding of learner progression, including expectations around what progression may look like and the pace at which learners may progress. This shared understanding should be developed through both professional learning and as an ongoing process both within and across schools, of which professional dialogue is a fundamental aspect. Working through clusters and networks, schools and practitioners can share and learn from each other's understanding of progression and collaborate to develop shared approaches to curriculum design.

# • Transition

Schools should consider how collaboration can support the planning of a continuum across different transitions, particularly for the most vulnerable learners. The learner should be at the centre of the transition process. Effective transition is about facilitating the smooth movement of all learners along the learning continuum, supporting them as they move between different groups, different classes, different years and different settings. Ensuring the well-being of all learners should be an important and integral part of the process, recognising the needs of individuals, while also supporting both continuity and progression in their learning.

## • Sharing best practice

Schools and practitioners should collaborate to develop an understanding of what underpins successful approaches and practices.

Welsh Ministers, working with regional consortia and other stakeholders, are developing networks to support and disseminate learning for practitioners to support understanding of the Curriculum for Wales Framework. More information on these will be provided in 2020 and 2021.

## Learner involvement

The selection of curriculum content should consider learners' input and should provide increasing opportunities for learners to help direct their learning as they progress. Learners' views about their experiences and about what, how and where they learn should be taken seriously when a curriculum is being designed. Participation is a key principle of the UNCRC and enabling participation will create an engaging curriculum that responds to learners' interests, needs and priorities. It is also a process that supports a dialogue between learners and professionals. It needs to be safe, enabling and inclusive, and it is of itself a valuable learning experience, supporting inquiry and critical thinking.

Learners should be informed about the process the school is taking to design the curriculum and should be given opportunities to be involved in decision-making. It should be made clear to learners how they have influenced decisions, with feedback given about what decisions have been taken and why.

It is important to recognise that there are different levels of participation, and that enabling learners to take part in curriculum design can take place in different forms. Learners can be informed about decisions, can be consulted about decisions, can share decision-making with adults or can own decision-making and set their own areas and questions for consideration by the wider school community. Different forms of participation will be appropriate at different points in curriculum design.

Curriculum design should also use a participation structure that ensures all groups of learners can participate, including those who can be marginalised.

Involving learners directly in the designing of their curriculum could include the following steps.

- Enabling learners to make choices about what and how they learn.
- Collecting qualitative feedback after learning experiences, which informs ongoing curriculum design.
- Considering learners' perspectives on a daily basis in the classroom through participatory pedagogy.
- Involving learners in setting priorities for the curriculum and for learning content.
- Ensuring that resources are identified to support participation.
- Ensuring that consultation, analysis of learners' views and feedback are included as steps in the curriculum design and evaluation process.
- Ensuring that feedback on the outcomes of learner voice contributions are given to learners and staff and that this is factored into the timescales for curriculum design.
- Ensuring that learners are informed about the school's process of curriculum design in an accessible language and format and that they know what opportunities there are to get involved.

## Working with parents, carers and stakeholders

In developing their curriculum, schools should involve learners, parents, carers, partner agencies and the local community. This is an important means of ensuring the curriculum meets learners' needs and is authentic to their context within the national framework. Schools and practitioners also play a critical role in ensuring learners, parents, carers and communities understand the vision and ethos underpinning the curriculum.

Learners, parents, carers and the local community should also have opportunity to contribute to curriculum design. Communicating effectively with parents and carers on an ongoing basis is an important way to foster positive relationships in order to engage them in purposeful and meaningful dialogue. When undertaken well, this can help aid learner progression by helping parents and carers to understand how they can support learning within and outside the school environment. Schools' curricula should also recognise and reflect the needs and contexts of the communities within and beyond the school. Practitioners should also seek to collaborate and draw on a range of experts and stakeholders who can contribute to learning, providing learners with distinct and enriching experiences.

### **Reviewing a curriculum**

Schools will be required to keep their curriculum under review so that they can respond to the outputs of professional inquiry, changing needs of learners and social contexts and needs. Schools will be required to publish a summary of their curriculum and revise the summary if they make changes to the curriculum.

# Pedagogy

Pedagogy is at the heart of curriculum. In designing their curriculum, schools should consider the pedagogical approaches they will need to employ to support learners in realising the <u>four purposes</u>. Schools should seek to develop a strong vision of learning and teaching which considers the 'why' and 'how' as well as the 'what'. This vision will recognise the integral role of the learning environment in supporting effective learning.

Schools should ensure that practitioners have a deep and thorough understanding of the pedagogical principles and the research on which they are based. Effective pedagogy relies on an in-depth understanding of child and adolescent development. It involves exploring and reflecting on which teaching strategies will best support learning in a given context, and inquiring about the impact of this on learners.

Curriculum design for learners of all ages and abilities should be underpinned by pedagogical principles. These reflect well-documented evidence about effective pedagogy.

## The pedagogical principles

Curriculum design for all learners is underpinned by twelve pedagogical principles, which state that good learning and teaching:

- 1. maintains a consistent focus on the overall purposes of the curriculum
- 2. challenges all learners by encouraging them to recognise the importance of sustained effort in meeting expectations that are high but achievable for them
- 3. means employing a blend of approaches including direct teaching
- 4. means employing a blend of approaches including those that promote problemsolving, creative and critical thinking
- 5. sets tasks and selects resources that build on previous knowledge and experience and engage interest
- 6. creates authentic contexts for learning
- 7. means employing assessment for learning principles
- 8. ranges within and across Areas
- 9. regularly reinforces the cross-curricular skills of literacy, numeracy and digital competence, and provides opportunities to practise them
- 10. encourages learners to take increasing responsibility for their own learning
- 11. supports social and emotional development and positive relationships
- 12. encourages collaboration.

To support the curriculum, pedagogy should help learners to develop:

- a strong disposition to learning
- strong metacognitive skills
- critical, creative, problem-solving skills
- highly effective communication skills.

The learning environment is a key enabler for the curriculum. It should:

- encourage learners to be independent, to have a say in their own learning and to take increasing responsibility for it
- include all learners
- allow learners of all ages to experience authentic learning opportunities both indoors and outdoors
- enable learners to apply, use, consolidate and extend skills
- be secure and safe.

To support this, practitioners should:

- form positive and respectful relationships with learners and support good relationships between peers
- respond to all learners
- plan engaging and developmentally appropriate learning opportunities informed by regular observation and ongoing assessment of learning and the learner's stage of development
- prompt learners to think about and reflect upon their learning in order to extend thinking and make connections
- challenge learners and have high expectations
- actively engage with parents, carers and the wider community as partners in learning
- be reflective and seek to engage in ongoing professional learning.

# Early progression steps

The twelve pedagogical principles describe good pedagogy for all the early stages of learners' development. While it is relevant for all learners, pedagogy for the early progression steps should prioritise:

- the holistic development of cognitive, social, emotional and physical skills
- learning through extended periods of play or recreation and open-ended exploration both indoors and outdoors
- learners initiating, choosing and directing their own learning, along with sensitive interactions from adults who elicit learning from learner-led play or recreation and exploration
- the planning of an environment that can support experiential and schematic learning
- opportunities for physical movement which underpin learning in all Areas

- practitioners who, while respecting learners' interests, seek to introduce and stimulate new opportunities for knowledge and understanding
- a strong focus on early language acquisition
- learning through first-hand, practical and authentic experiences
- a high-quality learning environment which provides opportunities to move freely between continuous, enhanced and focused activities, located indoors and outdoors.

# Key questions for settings and schools to consider

- 1. How will we create a culture which encourages practitioners to develop a deep understanding of pedagogy and the skill to select the most appropriate pedagogical approach?
- 2. How will we ensure the pedagogy of the Foundation Phase is developed and built on?
- 3. How will our vision for learning reflect the twelve pedagogical principles?
- 4. What learning environment do we need to create to fully support our vision for learning?

# Preparing for 2022

It is proposed that schools will be required to implement their curriculum from September 2022 for learners up to and including Year 7. Secondary schools will then be expected to roll out their curricula on a year-by-year basis, with Year 8 in September 2023 through to Year 11 in September 2026.

In advance of September 2022, all schools will be required to design their curriculum, including the supporting assessment arrangements, ready for its adoption. To prepare for this, they should develop the vision and methodology detailed in this 'Designing your curriculum' guidance.

Secondary schools will be required to design a curriculum for all year groups in advance of 2022, but will need to continue to refine this design in line with the phased roll-out of the curriculum beyond 2022 and to take account of the details of qualifications when they are confirmed. They will also be required to work with their clusters and with other secondary schools.

As the curriculum is rolled out, schools should consider how their curriculum should be revised in response to learning.

# **Expressive Arts Area of Learning and Experience**

# Introduction

The dynamic nature of the expressive arts can engage, motivate and encourage learners to develop their creative, artistic and performance skills to the full.

The Expressive Arts Area of Learning and Experience (Area) spans five disciplines: **art**, **dance**, **drama**, **film and digital media** and **music**. Although each discipline has its own discrete body of knowledge and skills, it is recognised that together they share the creative process.

What matters in this Area has been expressed in three statements, which support and complement one another and should not be viewed in isolation. Together they contribute to realising the four purposes.

Learning and experience in this Area encourages the development of knowledge, skills and values that can help learners grasp the opportunities and meet the challenges that arise in their lives.

Whether as creators or as audience, through engaging with the expressive arts, learners can gain an understanding and an appreciation of cultures and societies in Wales and in the world. Such engagement can equip learners with the skills to explore cultural differences through time and place.

Importantly, this Area wants to make the expressive arts accessible to all learners and, through this inclusive approach, expand the horizons of every learner.

Experiencing the expressive arts can engage learners physically, socially and emotionally, nurturing their well-being, self-esteem and resilience. This can help them become healthy, confident individuals, ready to lead fulfilling lives as valued members of society.

Experiencing the expressive arts can also encourage learners to develop not only their ability to appreciate the creative work of other people, but also their own creative talents, artistic skills and performance skills. The aim is to provide learners with opportunities to explore, refine and communicate ideas while thinking creatively and engaging their imagination and senses.

Engagement with this Area requires personal application, perseverance and close attention to detail, dispositions that contribute to making learners **ambitious**, **capable learners ready to learn throughout their lives**.

Experiences in this Area can provide inspiration and motivation as it brings learners into contact with creative processes. This means providing learners with opportunities such as visits to theatres and galleries and bringing the expertise of external practitioners into the classroom.

Engagement with the expressive arts can enhance learners' employability as they are encouraged to manage their time and resources to achieve meaningful work and meet deadlines. It can foster critical inquiry that can lead to change. Together, these skills can support learners to become **enterprising**, **creative contributors**, **ready to play a full part in life and work**.

In addition, the evaluation involved in the creative process enables learners to explore complex issues, to challenge perceptions and to identify solutions. This can lead learners to a better understanding of their own cultural identity and that of other people, places and times. From this experience they are supported to become **ethical**, **informed citizens of Wales and the world**.

Finally, through the enjoyment and personal satisfaction they gain from creative expression, learners can become more confident, which can contribute directly to enriching the quality of their lives.

# **Statements of what matters**

# Exploring the expressive arts is essential to developing artistic skills and knowledge and it enables learners to become curious and creative individuals.

Exploring this Area, both through their own creative work and other people's, engages learners with genres, techniques, tools, materials and practices and enables them to become curious and creative individuals.

By exploring forms and disciplines in the expressive arts, whether through experimentation, play or formal research and inquiry, learners can develop an understanding of how the expressive arts communicate through visual, physical, verbal, musical and technological means. This exploration can also progress their understanding of how the expressive arts shape ideas and feelings. It can encourage them to develop their imagination and draw upon their own experiences, skills and talents to become creative artists themselves.

The expressive arts are also a powerful medium through which learners can explore Wales and its unique traditions and diverse cultures. They can provide opportunities for learners to explore their own cultural heritage and that of other people, places and times, and through this discover how the expressive arts can be used to shape and express personal, social and cultural identities. Learners can also explore how the expressive arts can be used to question and challenge viewpoints and be a force for personal and societal change.

# Responding and reflecting, both as artist and audience, is a fundamental part of learning in the expressive arts.

Responding within the expressive arts engages the emotions and the intellect. Response may be a simple sensory reaction to artistic stimulus or a critical analysis of creative work. The ability to reflect is deepened as learners increase their knowledge and understanding of how and why creative work is developed and produced.

Adopting the skills and critical vocabulary encountered in this Area can equip learners to consider creative work in a range of media, forms, genres and styles.

Learning the important skills of refinement and analysis can contribute to their creative development.

Learners' resilience can also be developed when they are encouraged to identify how they can improve their work and respond to feedback from others.

The act of responding encouraged by engagement in this Area challenges learners to reflect on the effectiveness of their own work and that of others, including the work of artists from Wales and beyond.

# Creating combines skills and knowledge, drawing on the senses, inspiration and imagination.

By engaging with this Area, learners will be given opportunities to be innovative and bold, to create individual work and to develop their own identity as artists in Wales. This learning and experience can foster resilience and flexibility to overcome challenges.

Creating in the expressive arts embraces a range of activities including planning, drafting, designing, making, choreographing, shaping, composing and editing. Creating requires learners to develop and demonstrate control of a range of skills and an application of knowledge.

During the creative process learners communicate through a variety of art forms or disciplines. Communication includes performing, presenting, sharing, exhibiting and producing with consideration of the audience.

In this Area, learners' engagement with the creative process can enable them to recognise opportunities to transform their ideas safely and ethically into work which has cultural and commercial value, and to use their creative skills to realise ambitions.

# **Principles of Progression**

# Increasing breadth and depth of knowledge

Learners demonstrate progression in the Expressive Arts Area of Learning and Experience (Area) by exploring, experiencing and creating increasingly complex meaning. Linking new learning to existing knowledge develops an increased sophistication of conceptual understanding. Moreover, learners learn and refine different types of knowledge and skills including the techniques, processes and skills required to create and interpret in each field of the arts. Additionally the integral skills of creativity; synthesis; critical thinking; and understanding of social and cultural contexts are crucial to this Area.

# Deepening understanding of the ideas and disciplines within areas of learning and experience

Progression is demonstrated through the continuing development of the knowledge, skills and capacities required to appreciate, create, explore, respond and reflect both within specific disciplines and in combinations of disciplines. In the early stages, learning is characterised by a growing curiosity for being creative and innovative by exploring with a range of resources and materials in various domains. Combining disciplines occurs purposefully but remains organic. As learning progresses, learners become increasingly aware of the expressive arts' disciplines and their key features, including (though not necessarily limited to) art, dance, drama, film and digital media, and music. Learners make links in the creative process across the disciplines to explore, create, interpret and respond.

## Refinement and growing sophistication in the use and application of skills

Levels of control, accuracy and fluency in using a range of arts' skills will grow as learners progress. For example, in early stage learning this might be characterised by using simple body movements in composing a dance and identifying fundamental aspects such as speed, direction and levels when evaluating one's own work and the work of others. At a more advanced stage of progress, learners might create and evaluate the success of interaction among various aspects of movement in a complex choreographed dance. As they progress, learners continually develop in depth and refine with a growing sophistication these key arts' skills in different disciplines and/or in interdisciplinary activity.

## Making connections and transferring learning into new contexts

Learners increasingly appreciate the possibility of combining disciplines within the Area in order to appreciate and to achieve/produce creative outcomes. Progression is also characterised by more sophisticated use of relevant skills within individual disciplines and the growing ability to transfer existing skills and knowledge into new contexts within this Area and across other Areas.

#### Increasing effectiveness as a learner

Progression is demonstrated in moving from doing something with the support of the teacher, towards autonomy and sophistication. Progression is likely to grow out of gradual use and re-use of known skills, but could also, on occasion, present as a big qualitative jump.

As learners make progress they increasingly evaluate and create more and more sophisticated creative work independently and with increased collaboration with others. They gain greater confidence by being able to explore, experience, interpret, create and respond through the expressive arts' disciplines within a safe environment. Their evaluation of their own and others' work reflects a developing understanding of process as well as product, and resilience in receiving, and persistence in acting upon, feedback.

# **Descriptions of learning**

Exploring the expressive arts is essential to developing artistic skills and knowledge and it enables learners to become curious and creative individuals.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can explore and experiment with a variety of creative techniques, materials, processes, resources, tools and technologies.	I can explore and experiment with and then select appropriate creative techniques, practices, materials, processes, resources, tools and technologies	I can explore and experiment independently and demonstrate technical control with a range of creative materials, processes, resources, tools and technologies showing innovation and resilience. I can explore the effects that a range of creative techniques, materials, processes, resources, tools and technologies have on my own and others' creative work.	I can explore and experiment with my own and others' creative ideas, demonstrating increasingly complex technical control, innovation, independent thinking and originality to develop my work with confidence, being able to explain my reasons behind choices made and evaluate their effectiveness on my creative work.	technical control, innovation, independent thinking and originality, showing confidence to take risks and developing

I can ask questions to discover how creative work is made.	I can explore how and why creative work is made by asking questions and developing my own answers.	I can explore how creative work can represent, document, share and celebrate personal, social and cultural identities.	I can explore creative work, understanding the personal, social, cultural and historical context, including the conventions of the period in which it was created.	I can investigate and analyse how creative work is used to represent and celebrate personal, social and cultural identities.
I am beginning to explore ideas, feelings and moods in a variety of creative work.	I can explore and describe how artists and creative work communicate mood, feelings and ideas.	I can explore and describe how artists and creative work communicate mood, feelings and ideas and the impact they have on an audience.	I can investigate and understand how meaning is communicated through the ideas of other artists and performers.	I can independently research the purpose and meaning of a wide range of creative work and consider how they can impact on different audiences.

# Responding and reflecting, both as artist and audience, is a fundamental part of learning in the expressive arts

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can listen to and respond to views about my own creative work and that of others.	I can give and accept feedback as both artist and audience.	I can give and consider constructive feedback about my own creative work and that of others, reflecting on it and making improvements where necessary.	increasing confidence to recognise and articulate strengths, and to	I can critically and thoughtfully respond to and analyse the opinion and creative influences of others in order to independently shape and develop my own creative work.

I am beginning to compare my own creative work to the creative work of others.	I can compare my own creative work to creative work by other people and from other places and times.	I can apply knowledge and understanding of context, and make connections between my own creative work and creative work by other people and from other places and times.	context when evaluating my own creative work and creative work by other people and from other places and times.	I can purposefully apply knowledge and understanding of context when evaluating my own creative work and creative work by other people and from other places and times.
I am beginning to talk about my moods and emotions and use these to impact upon my creative work.	I can consider, with guidance, how moods, emotions and ideas are communicated both in my own creative work and in the creative work of others.	I can reflect upon how artists have achieved effects or communicated moods, emotions and ideas in their work.	0	I can critically evaluate the way artists use discipline- specific skills and techniques to create and communicate ideas.

# Creating combines skills and knowledge, drawing on the senses, inspiration and imagination.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can communicate my ideas, feelings and memories in my creative work.	audience and for	•	I can use my experimentation and investigation to manipulate creative work with purpose and intent when communicating my ideas.	5

I can imitate established artistic techniques in the creation of my own work.	I am beginning to apply techniques in my creative work with guidance and direction.	I can draw upon my familiarity with a range of discipline-specific techniques in my creative work.	I can apply specialised technical skills in my creative work.	I can use professionally established, discipline- specific techniques confidently and convincingly in my creative work and work towards industry standard.
I am beginning to design my own creative work.	I can create my own designs and work collaboratively with others to develop creative ideas.	I can draw upon my design knowledge and make connections with greater independence to modify and develop my creative designs.	I can purposefully use my design skills and apply a range of solutions to clarify and refine final creative ideas.	I can design creative outcomes to professional and industry-standard with sophistication, clear purpose and intent.
I can share my creative work.	I can perform, produce, design, exhibit and share my creative work in a variety of ways for different audiences, inspired by a range of stimuli and experiences.	I can perform, produce, design, exhibit and share my creative work in formal and non-formal contexts, considering the impact of my creative work on the audience.	I can perform, produce, design, exhibit and share my creative work showing an awareness of artistic intent and of audience.	I can consider artistic intent, purpose and audience in an informed way when performing, presenting and marketing my creative work.
	I am beginning to demonstrate resilience and flexibility in approaching creative challenges.	I can identify and respond creatively to challenges with resilience and flexibility.	I can draw upon my experiences and knowledge to inform and develop strategies to overcome creative challenges with imagination and resilience.	I can use effective strategies to take risks with my own creative work and can display resilience to overcome creative challenges.

with guidance and	supervision.	tools and materials with some consideration for	myself, others, audience, participants and matters of intellectual property when creating work.	creative work in relation to
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# **Designing your curriculum**

This provides specific guidance to be used when incorporating learning in the expressive arts in your curriculum. It should be read together with the overarching <u>Designing your curriculum</u> section which is relevant to learning and teaching across all areas of learning and experience.

# Cross-curricular skills and integral skills

A curriculum must embed the mandatory cross-curricular skills and the integral skills which underpin the four purposes of the curriculum. Below are some key principles which settings/schools should consider when designing learning and teaching in the Expressive Arts Area of Learning and Experience (Area).

## **Cross-curricular skills**

## Literacy

From exposure to and involvement in this Area, learners develop skills that are essential for the critical analysis and use of language receptively and expressively. Learning and experience in this Area provides a range of purposeful and rich contexts where learners' literacy skills can be reinforced, developed, applied and extended. Exploration and exposure to a variety of creative work can be powerful in the development of reading strategies and higher-order reading skills, such as inference and deduction. It is a versatile platform for learners to acquire the skills and knowledge to adapt their language for audience and purpose and provides purposeful opportunities for building confidence so that learners can express themselves as individuals and in role.

## Numeracy

This Area provides creative opportunities to develop numeracy skills in a range of engaging contexts. Learners communicate with symbols and use a range of mathematical language. They explore concepts related to geometry and measurement such as size, shape, symmetry, scale, length, dimension, distance, position, viewpoint and time. They also explore concepts related to number such as structure, pattern and rhythm, counting, repetition, phrasing and financial literacy.

## **Digital competence**

This Area provides a wealth of opportunities to develop digital competence in areas such as digital collaboration, production technology, intellectual property, artificial intelligence, digital rights, licensing and ownership, body image and photo editing, as well as the saving, sharing and distribution of digital work.

## Integral skills

# **Creativity and innovation**

The creative process is the essence of this Area. The statements of what matters enable learners to develop knowledge, and creative and innovative skills. Learners are expected to consider influences and shape their own creativity. Learners use their creative skills and imagination, discover possibilities and refine ideas to produce their own unique artistic work. Creative thinking developed by exploring within and through this Area enables learners to investigate the unknown and make connections. Learners take creative risks to go beyond existing knowledge and accept failure as a learning experience.

# Critical thinking and problem-solving

Refining work is encouraged throughout one of the statements of what matters in this Area, with the aim of building skills in self-evaluation and reflection. The evaluation involved in the creative process enables learners to develop reflective, questioning and problem-solving skills, as well as to challenge perceptions and identify solutions. Learners may demonstrate resilience in applying critical appraisal of their work and be expected to respond positively to critical feedback. Learners can develop problem-solving skills by experimenting with a variety of arts and artistic techniques.

# **Personal effectiveness**

Through the statements of what matters in this Area, learners develop selfconfidence, self-esteem, independence, communication skills and social and cultural awareness. Learners become enterprising, resourceful and resilient by managing themselves and their resources, and this in turn enhances their employability skills. They are encouraged to develop resilience through accepting failure and value its place in the creative process.

## Planning and organising

Through this Area, learners are encouraged to plan, set their own goals and manage resources. They can apply reflective, critical and creative processes to make sense of ideas and experiences. The ability to generate ideas, develop curiosity, explore and bring ideas into action is fundamental to this Area.

# **Specific considerations for this Area**

The statements of what matters in this Area represent the creative process. Through the creative process, learners explore, respond to stimuli and create and reflect on their own work while engaging in rich, authentic experiences.

This Area spans the five disciplines of art, dance, drama, film and digital media, and music. These disciplines share the creative process, and each contributes transferable skills and knowledge to a learner's experience. In addition, each discipline has its own discrete body of knowledge and skills; this learning supports progression and offers greater depth to learning. This Area is designed to support the development of a more integrated approach to learning.

There is flexibility to choose how to structure the curriculum, such as through an integrated, multidisciplinary, interdisciplinary or disciplinary approach. Across the learners' journey on the 3 to 16 continuum, it is important to offer broad and balanced opportunities for art, dance, drama, film and digital media and music. The delivery should be adaptive, versatile and change depending on the learners and their context.

Regardless of the approach chosen, it is important to note that the statements of what matters are interlinked and should not be taught in isolation. Together they allow learners to engage fully with the creative process which each of the expressive arts' disciplines has in common.

## Considerations when designing your curriculum

- equitable opportunities to include the five disciplines of art, dance, drama, film and digital media, and music
- progression along the continuum complexity, control, depth and independence
- experience, knowledge and skills inherent to and across each discipline
- opportunities to work independently and collaboratively
- a range of stimuli, techniques, materials and resources, tools and technologies
- styles, genres and creative texts across all disciplines and spanning people, places, cultures and time
- discipline-specific vocabulary and skills
- experience of actual and virtual venues, and local, national and international arts events and festivals
- critical appreciation and response
- input from creative professionals and industry experience
- access to local, national and international contexts
- access to practical and theoretical exploration
- opportunities for learners to take on a range of roles and responsibilities within the creative process.

# Illustrating breadth

The following are provided as examples of how you could explore different topical learning in this Area. These are illustrations only.

This Area could include exploring not only the artistic techniques and impact of creative work by Bob Dylan, Joseph Parry and The Joy Formidable, but engaging with the social influences, context and narrative of those works to inspire learners' own work. The art of Ceri Richards, Martin Parr and Mary Lloyd Jones has a distinct relationship to Wales, this could be an inspiration for learners developing their own understanding and creative skills. The films Tiger Bay, House of America, and Solomon a Gaenor each portray different Welsh experiences and communities, learners could use these to recognise and analyse character, identity and place, as they challenge and develop their own identities and imagination through the arts.

## **Discipline-specific considerations**

Experience, knowledge and skills inherent to each discipline are included in progression steps 1 to 5 with increasing levels of complexity. These include but are not limited to the following:

## Art

Art includes the experimentation and development of an almost limitless range of resources, materials, techniques and processes across all types of art, craft and design to produce a range of outcomes and to demonstrate a personal and creative response.

You should consider:

- line, shape, texture, colour, design, form (2D, 3D, 4D), pattern, tone, shading, space, contrast, proportion, composition, scale, perspective
- architectural design, advertising, animation, constructed textiles
   (knitting/weaving/embellishment), ceramics, craft, design, drawing,
   environmental/landscape art, fashion, fine art, communication graphics,
   jewellery and body adornment, illustration, interactive design (including
   web, app and game), interior design, installation, live art, making, mixed
   media, moving image, multi-media, package design, painting, photography,
   print-making (relief/intaglio/screen processes/lithography), signage,
   sculpting, sound art, surface pattern, textiles, typography, video.

# Dance

Dance includes performing, choreography and appreciation across a range of styles.

You should consider:

- movement framework (body actions, space, dynamics, relationships), time (rhythm and phrasing), improvisation, character, motifs/phrases
- choreographic devices (unison and canon, repetition, variation and development, complementary and contrasting, climax, highlights)
- compositional structures (beginning, middle and end, binary, ternary, rondo, theme and variation, narrative, unity, logical sequence, transitions)
- dance compositions (pure, abstract, lyrical, dramatic, comic, dance-drama)
- performance/refinement including physical elements (actions, posture, alignment, balance, coordination, control, flexibility, mobility, strength, stamina, extension, isolation)
- expression (projection, spatial awareness, musicality, phrasing, facial expression, interpretation, communication)
- technical considerations (timing, reproduction of movement in a stylistically accurate way).

# Drama

Drama includes acting, directing, design, technical theatre and arts administration.

You should consider:

- plot, character, thought, relationships (which encompasses interaction), tension, focus, place, time, language, voice (which encompasses accent, diction, pitch, tempo, pauses), movement (which encompasses gesture, facial expressions), proxemics, atmosphere, mood, symbols, design which encompasses stage lighting, sound, set, hair, make-up, costume, script writing, directing and stage management
- comedy, tragedy, tragicomedy, farce, musical theatre, melodrama, mime, physical theatre.

# Film and digital media

Film and digital media includes television, film, radio, games design, photography, live events and theatrical production skills, print media, social media, sound and audio production.

You should consider:

- editing, post production, 3D space, 2D space, sound, lighting, camera, narrative, style, genre, audience, composition (visual, virtual and sonic), form (animation, live action, audio, written), virtual reality
- sound, video/film (animation, documentary, narrative, music video), print media, radio/podcast, photography, graphics, virtual forms, linear forms, non-linear forms, interactive media, social media, audio production and design, lighting design, stage design, social media, game design, event design, production design.

# Music

Music includes performing, improvising and composing, listening and appreciation.

You should consider:

- pitch, melody, dynamics, texture, tempo, timbre, rhythm, metre, form and structure, tonality, musical devices (e.g. repetition, ostinato, sequence), harmony, intonation
- binary, ternary, rondo, round, minuet and trio, strophic, theme and variation, through-composed, sonata
- performing (including vocal, instrumental, technology e.g. DJ-ing), improvising and composing (including vocal, instrumental, acoustic, electric and digital, editing/production), listening (including analysing, evaluating, and appreciating a range of musical forms and styles across genres and periods of time).

### Key links with other Areas

When designing your curriculum, you should consider how learning links across Areas. The creative process, as exemplified in the statements of what matters in this Area, can be used across all other Areas to enhance, stimulate and support learning. Equally, expressive arts' skills and knowledge can be developed through other Areas. Some of the key links to learning in this Area are detailed below.

### Health and Well-being

The Health and Well-being Area of Learning and Experience provides opportunities for creative movement and dance as a physical activity and can enable learners to develop gross motor movements and fine motor movements to support participation in the arts' disciplines. Involvement in the expressive arts can enable learners to develop a sense of self, build confidence, and explore different forms of communication and relationships which can support mental health and emotional well-being.

### **Humanities**

Art, music, dance, theatre, forms of media and literature are valuable pieces of evidence for enquiries in the humanities and are mediums for expression of people's interpretations and viewpoints. The natural world, the past and present all act as stimuli and contexts in the Expressive Arts Area of Learning and Experience. Throughout the past, and present the expressive arts have been important in shaping culture and societies. Exploring the arts from various times, cultures and societies, including from Wales (e.g. Eisteddfod), allows learners to develop their understanding of other cultures as well as their own. Exploration of social and ethical concepts, sustainability and business can act as a stimulus for creative work.

## Languages Literacy and Communication

Expressive Arts disciplines can be used as a vehicle for learners to develop languages, literacy and communication including through visual literacy, creative thinking and creative writing, understanding audience and purpose and adapting language for audience, performance poetry, drama, film, multimedia, role play and song. Experiences of literature in all its forms across these two Areas enable the learner to develop cultural empathy and sensitivity.

#### **Mathematics and Numeracy**

The use of numeracy and concepts from this Area are embedded in the Expressive Arts Area of Learning and Experience, supporting all disciplines. Consideration should be given to counting, sequencing and time and the exploration of how space, patterns, symmetry, shape and position can be used across the arts. Ratios, scale, proportions and fractions can also be explored in the Expressive Arts, for example in music. The use of songs and rhymes can assist with the embedding of numeracy at the early progression steps.

# Science and Technology

These Areas have close links, both relying on similar methods which include a process of discovery and divergent thinking and the generation of ideas which can lead to creative output and innovation. Design thinking and design processes in science and technology complement the approach to design and investigation in the expressive arts, and also involve the exploration of different media through which design and creativity can be communicated to others. In both Areas creative approaches are applied to explore concepts and materials, as well as the development of learners' manual dexterity, accuracy, precision and craftsmanship supporting production. Knowledge of the nature and development of materials is important for their selection in design and production and even understanding the science of waves can support an appreciation of and development in music.

# **Cross-cutting themes**

# Local, national and international contexts in this Area

Embedding local, national and international contexts in this Area should include:

- a focus on Welsh culture and traditions to ignite further learning through experiencing artists, craftspeople, creative work, designers, musicians, performers, performances and venues, from both a contemporary and traditional perspective
- exploration of creative work from learners' own locality and in Wales, as well as in the wider world to influence their own work and to appreciate and respond to cultural diversity
- learning about the impact of the creative and cultural industries sector on people and places in Wales and the contribution its diverse landscape has in shaping and evolving an ever-changing creative and cultural future.

## Careers and work-related experiences in this Area

This Area equips learners with the necessary skills to pursue careers within the creative and cultural industries. There is a plethora of careers available in these creative environments which include architecture and design, technical support, traditional and emerging craft, performance and production, management, marketing creative products, sales, archive and curation, research and development and writing and composing music. The transferable skills of this Area contribute to the wider economy's need for leadership, creativity and innovation, design thinking, and an ability for collaboration and teamwork.

Collaboration and access to individuals and employers can provide learners with opportunities to learn about work, employment and the skills valued in the workplace, e.g. arts practitioners, industry professionals, film and drama production companies, digital and broadcast media professionals, musicians and dancers. In this Area, the knowledge and skills gained in work-related experiences can provide authentic learning which leads to a deeper understanding of the opportunities that exist in the world of work.

#### Human rights education and diversity in this Area

#### Human rights

Throughout this Area, learners engage with art forms from their own and other cultures. Learners gain knowledge and understanding through exploring and communicating how identities, views and rights are portrayed. Engagement with this Area encourages learners to develop positive, respectful attitudes.

#### **Diversity**

In this Area, learners explore and celebrate creative work from diverse cultures and societies. Challenging stereotypes and perceptions through exploring and producing creative work empowers learners to develop positive attitudes and value diversity.

### Health and Well-being Area of Learning and Experience

#### Introduction

The Health and Well-being Area of Learning and Experience (Area) provides a holistic structure for understanding health and well-being. It is concerned with developing the capacity of learners to navigate life's opportunities and challenges. The fundamental components of this Area are physical health and development, mental health, and emotional and social well-being. It will support learners to understand and appreciate how the different components of health and well-being are interconnected, and it recognises that good health and well-being are important to enable successful learning.

Engagement with this Area will help to foster a whole-school approach that enables health and well-being to permeate all aspects of school life.

What matters in this Area has been expressed in five statements which support and complement one another and should not be viewed in isolation. In order to achieve this holistic approach, teachers should seek to draw across all five statements when planning activities. Together they contribute to realising the four purposes of the curriculum.

Effective realisation of the vision described in this Area is fundamental to developing healthy, confident individuals, ready to lead fulfilling lives as valued members of society. By developing learners' motivation, resilience, empathy and decision-making abilities, they can be supported to become ambitious, capable learners, ready to learn throughout their lives.

Learners can also be supported to become ethical, informed citizens of Wales and the world by developing their ability to show respect, to value equity, to listen to others and to evaluate the social influences affecting them.

Through enabling learners to manage risks, express ideas and emotions, develop and maintain healthy relationships, and take on different roles and responsibilities, the learning and experience in this Area can support learners to become enterprising, creative contributors ready to play a full part in life and work.

#### **Statements of what matters**

#### Developing physical health and well-being has lifelong benefits.

This Area can help learners to understand the factors that affect physical health and well-being. This includes health-promoting behaviours such as physical activity, including but not limited to sport; balanced diet; personal care and hygiene; sleep; and protection from infection. It also includes an understanding of health-harming behaviours.

From this understanding, learners can develop positive, informed behaviours that encourage them both to care for and respect themselves and others. These behaviours support learners' sense of self-worth, their overall mood and energy levels.

Learners will be encouraged to develop the confidence, motivation, physical competence, knowledge and understanding that can help them lead healthy and active lifestyles which promote good physical health and well-being.

# How we process and respond to our experiences affects our mental health and emotional well-being.

This Area can help learners explore the connections between their experiences, mental health and emotional well-being. By being provided with opportunities to explore the complexities of these connections, learners can be enabled to recognise that feelings and emotions are neither fixed nor consistent.

Having an awareness of our own feelings and emotions is the foundation upon which empathy can be developed. This can enable us to act in a way which supports the mental health and emotional well-being of others. Supporting learners to develop strategies which help them to regulate their emotions can contribute towards good mental health and emotional well-being.

By learning how to communicate their feelings, learners will be better placed to create a culture where talking about mental health and emotional well-being is normalised.

#### Our decision-making impacts on the quality of our lives and the lives of others.

This Area can help learners to understand how decisions and actions impact on themselves, on others and on wider society, both now and in the future. It can also help learners understand the factors that influence decision-making, thus placing them in a better position to make informed and considered decisions.

Learning and experience in this Area can enable learners to develop the criticalthinking skills necessary to consider their decision-making in terms of possible implications, including risks, for themselves and others. This can offer learners opportunities to engage in collective decision-making and to understand the importance of their contributions to this process.

A key decision that affects learners for life is around their career pathways.

# How we engage with social influences shapes who we are and affects our health and well-being.

This Area can help learners understand the important role of social influences on their lives. These influences are comprised of rules, social norms, attitudes and values that are created and reinforced by different social groups. It is through interaction with social groups that we experience these influences. They affect our identity, values, behaviours and health and well-being, and often do so without our being aware of it.

Learners will need to engage critically with these social influences within their own culture, as well as those of others, in order to understand how norms and values develop. This can enable them to understand how their own behaviours, relationships and experiences are shaped.

#### Healthy relationships are fundamental to our well-being.

This Area can help learners understand and value how feelings of belonging and connection that come from healthy relationships have a powerful effect on health and well-being.

Learners need to recognise when relationships are unhealthy and need to be aware of how to keep safe, and seek support for themselves and others.

Learners will be encouraged to understand that, throughout their lives, they will experience a range of relationships. They will also be encouraged to develop their abilities to form, nurture and maintain relationships.

As a result, they will see how healthy relationships are vital for a healthy body and mind, allowing us to thrive.

### **Principles of progression**

Progression within the Health and Well-being Area of Learning and Experience (the Area) is non-linear and follows different pathways within and between progression steps. Personal concerns, interests and circumstances may have an impact on the pathways along which a learner makes progress, particularly in the context of feelings and emotions; learning may take place at different rates at different times.

#### Increasing breadth and depth of knowledge

Progression within the Area is a continuum of increased sophistication over a period of time whereby existing knowledge is revisited but at a deeper level. Knowledge moves from the concrete to abstract and from merely understanding to understanding consequences. This includes conceptual shifts in knowledge and understanding as well as personal behaviour within physical, emotional and mental well-being, and in relationships and social contexts.

#### Deepening understanding of the ideas and disciplines within Areas

Progression in each of the statements of what matters are connected and interdependent. Together, they focus on progressively developing learners' appreciation and understanding of the significance of making informed decisions regarding their physical, emotional and mental health and well-being. Thus there is a growing understanding of how the statements of what matters interlink in ensuring a clear pathway for where the learner is going and how to get there.

#### Refinement and growing sophistication in the use and application of skills

Progression is demonstrated within the Area as developing confidence, motivation and competence as well as a wider range of skills with increasing accuracy and proficiency. It recognises that physical, emotional, psychological and social skills within and across the domains are to an extent reliant on but not constrained by developmental milestones. This is particularly evident as the initial progression step focuses on recognition and awareness of personal physical, emotional and social skills and then progressively moves towards more accuracy and mastery of these skills.

#### Making connections and transferring learning into new contexts

The transfer of skills and knowledge within the Area is considered as progression within the domain of becoming more socially responsible. As learners become more socially responsible, they progress from primarily considering oneself to considering the impact of their own actions on others at a local, national and global level. Learners will progress from feelings of caring and respecting others to the capacity of advocacy on behalf of others.

As learners progress through the curriculum their understanding of the links across and beyond the school with all aspects of health and well-being will become more sophisticated, and they will be able to identify and balance, with increasing effectiveness, some of the tensions that may exist.

#### Increasing effectiveness as a learner

Progression is exemplified within some aspects of the Area as a journey from developing a skill or a concept with support from others (peers or adults) to gradually becoming more competent and independent, including an increasingly capacity to identify and seek help and support when needed. Experiences focusing on making, justifying and evaluating considered and informed decisions support growth in metacognition as well as exemplifying how learners become more independent. Over time, learners are able to demonstrate increased self-regulation, with a growing sense of agency and responsibility for their overall health and well-being.

# **Descriptions of learning**

# Developing physical health and well-being has lifelong benefits.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I have the confidence and motivation to move in different ways and I am beginning to develop control of gross motor and fine motor movements in different environments, moving safely in response to	I can use and improve basic movement skills in familiar and unfamiliar situations. I can respond to prompts in imaginative and creative ways.	I can develop and apply a range of skills in familiar, unfamiliar and changing situations, exploring space creatively in response to a variety of stimuli. I can motivate myself to	I can transfer a range of movement skills from familiar to unfamiliar and changing situations and environments, using space creatively in response to a variety of stimuli.	I can independently adapt and apply movement skills across a range of activities and environments, managing space creatively in response to a variety of stimuli.
instructions.	I have the confidence and motivation to persevere when faced with physical challenges.	engage confidently in regular physical activity and sport, and am aware of my own progress.	I can engage in regular physical activity and sport with confidence, motivation and commitment.	I can value the benefits of participation in regular physical activity and sport, seeking opportunities to develop my expertise.
I am beginning to make connections between my diet and my physical health and well-being.	I have developed an understanding that I need a balanced diet and I can make informed choices about the food I eat and prepare to support my physical health and well- being.	I can explain the importance of a balanced diet and nutrition and the impact my choices have on my physical health and well-being.	I can apply my knowledge and understanding of a balanced diet and nutrition to make choices which will allow me to maintain my physical health and well- being.	I can adjust my diet in response to different contexts and apply my knowledge and understanding of a balanced diet and nutrition to support others.
		basic, nutritious meals.	I can plan and prepare a variety of nutritious meals.	I can apply a range of techniques to prepare a variety of nutritious meals.

I am beginning to recognise the connection between the physical and emotional changes that can occur in different contexts.	I can describe the way in which physical and emotional changes are connected in different contexts.	I can explain the way in which physical and emotional changes are connected in different contexts, and I can monitor, review and adapt my behaviour to support my physical and emotional health, setting myself relevant targets.	I can analyse the connection between physical and emotional changes. I can modify my behaviour to support my physical and emotional health, and can work collaboratively to plan and refine strengths and areas for improvements.	I can evaluate the connection between physical and emotional changes, independently selecting from a range of strategies to improve my physical and emotional health and that of others.
I am beginning to recognise some of the behaviours, conditions and situations that affect my physical health and well-being and I am beginning to know how to respond and get help.	I can recognise some of the behaviours, conditions and situations that affect my physical health and well- being, and I know how to respond and get help in a safe way.	I can describe the behaviours, conditions and situations that affect my physical health and well-being, and I know how to respond to and/or manage these in order to actively reduce the risk of harm to myself.	I can explain the behaviours, conditions and situations that affect my physical health and well-being and, through my actions, I can respond to and/or manage these in order to actively reduce the risk of harm to myself and to others.	I can apply my knowledge of the behaviours, conditions and situations that affect my physical health and well-being, to keep myself and others safe. I can safely intervene, using learnt techniques, when others' physical health is at risk.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I have an awareness of my perceptions and thoughts. I can focus my attention and am aware of being able to do this. I am beginning to have an awareness that thoughts and feelings change, and I am starting to notice when change happens.	I can, with support, focus attention on my perceptions and thoughts. I can understand how and why my thoughts, feelings and actions change in response to different experiences.	I can recognise the benefits of being able to focus attention on my perceptions and thoughts and know that I am developing my self- awareness. I can self-regulate my emotions in a healthy way using strategies that I have developed.	I can independently focus attention on my perceptions, thoughts and feelings in order to further develop my self- awareness. I can identify different strategies to self- regulate my emotions in response to a range of experiences.	I can use my self- awareness to appreciate the complexity of my emotions and apply strategies to self-regulate them in a healthy way and to connect with others.
I can notice and communicate how I am feeling. I am beginning to have an awareness of how feelings are communicated through actions.	I can notice and communicate my feelings. I am beginning to notice when I need help to manage my feelings	I can see the benefits of communicating about feelings as one of a range of strategies which can help promote positive mental health and emotional well-being. I can ask for help when I need it from people I trust.	I can advocate the benefits of communicating about feelings as one of a range of strategies which can help promote positive mental health and emotional well- being. I can identify people and groups who can help me with my mental health and emotional well-being.	I can contribute towards a culture where talking about mental health and emotional well-being is encouraged and normalised. I can identify when to seek help based on a good understanding of my mental health and emotional well-being.

### How we process and respond to our experiences affects our mental health and emotional well-being.

	I can reflect on my experiences.	I can reflect on the way that past events and experiences have affected my thoughts, feelings and actions. I can anticipate how future events may make me and others feel.	I can reflect and learn from the past in order to anticipate and prepare myself and others for future experiences.	I can respond to current experiences, as well as reflect, and learn from the past, in order to anticipate and prepare myself and others for future experiences.
I have an awareness of the feelings of others. I am aware of when others are kind to me and when I am kind to others.	I can pay attention to the feelings of others and I am learning to think about why they may feel that way.	I can empathise with others. I can understand how and why experiences affect me and others.	I can empathise with others and understand the value of demonstrating this through actions which are compassionate and kind.	I can empathise with others which helps me to be compassionate and kind towards myself and others.

# Our decision-making impacts on the quality of our lives and the lives of others.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can make decisions based on what I like and dislike.	I can make decisions based on what I know.	I can make considered decisions, taking into account available information, including past experiences.	I can research, examine and evaluate a range of evidence to make considered and informed decisions.	I can set appropriate goals, plan a course of action and overcome challenges to achieve them.
		l can set appropriate goals.	I can set appropriate goals and plan a course of action to achieve them.	

I have developed an awareness that my decisions can affect me and others. I can take part in group decisions.	I can recognise that my decisions can impact on me and others, both now and in the future. I can take part in group decisions and I understand why some decisions need to be made as a group.	I can recognise that some decisions I make will have a long-term impact on my life and the lives of others. I can understand that decisions can be made individually and collectively, and that they can be influenced by a range of factors.	I can consider relevant factors and implications when making decisions individually and collectively.	I can critically evaluate factors and implications, including risks, when making decisions individually and collectively.
I have an understanding that things can be safe or unsafe.	I can identify and assess risks.	I can identify and assess risks, and I can take steps to reduce them.	I can anticipate, assess and manage risks.	I can critically evaluate factors and implications, including risks, when making decisions individually and collectively.

# How we engage with social influences shapes who we are and affects our health and well-being.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can recognise and follow rules and norms in the groups and situations in which I take part.	I can recognise and follow the rules and norms of different groups and situations in which I take part.	I have an understanding of the rules, norms and behaviours of different groups and situations, and I recognise that these have an influence on me.	I have a developing awareness of how rules, norms and behaviours become established within groups and at times go unchallenged.	I have an understanding of the complexities of groups and situations, the interactions that take place within and between them, and their effect on those exposed to them.

I can show care and respect for others.	I can change how I interact and behave in different situations with support.	I can interact pro-socially in different groups and situations. I have developed an	I can interact pro- socially in different groups and situations, adapting my behaviours accordingly.	I can interact pro-socially in different groups and situations, and actively advocate for other individuals and groups.
	I can recognise that there are similarities and differences between people's values and attitudes.	understanding that my values, attitudes and identity are shaped by different groups and influences.	I can evaluate how my values, attitudes and identity are shaped by the groups and social influences with which I interact.	I can recognise and understand how people's values, attitudes and identity are shaped by different groups and influences.
				I can promote positive attitudes and values, and, where appropriate, I can challenge harmful ones.

# Healthy relationships are fundamental to our well-being.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can identify who looks after me and who my family and friends are.	I can recognise that there are different types of relationships beyond my family and friends.	I can understand that there are differences within types of relationships and that relationships change over time.	I can show a developing awareness of the complex nature of relationships.	I can show an understanding of the complex nature of relationships in a range of contexts and an understanding of how they are influenced by a range of factors.

I can communicate my needs and feelings in my relationships.	I can communicate my needs and feelings in my relationships, and notice the needs and feelings of others.	I can communicate my needs and feelings, and respond to those of others.	I can communicate my needs and feelings, and respect those of others.	I can make meaningful connections with others, valuing safe, healthy and equitable relationships in a range of contexts.
I can get along with others with and without support.	I can make friends and try to resolve disagreements, seeking support when needed.	I can make and maintain relationships that matter to me, identifying conflict and taking steps to resolve it.	I can form and maintain healthy relationships with a wider circle of people. I can respect other people's points of view and use this to help resolve conflict.	I can make meaningful connections with others, valuing safe, healthy and equitable relationships in a range of contexts. I can take steps to avoid conflict and to remove myself from unsafe relationships. I can draw on support systems for myself and others when needed.
I am beginning to recognise safe and unsafe behaviour in relationships.	I can recognise when I feel safe in my relationships and I can communicate when I do not feel safe.	I can reflect on the characteristics of safe relationships and I can seek support when needed.	I can consider the role of safety in relationships and I can identify where my safety or the safety of others is threatened and I know how to respond to this.	I can take steps to avoid conflict and to remove myself from unsafe relationships. I can draw on support systems for myself and others when needed.
I am beginning to recognise that I have the right to be treated fairly and respectfully.	I can understand that everyone has rights and, with support, I can respect those rights.	I can respect the rights of others and I understand how these impact on myself and others.	I can exercise my own rights and respect those of others, and I can recognise that rights can be infringed.	I can advocate the rights of myself and others.

#### **Designing your curriculum**

This provides specific guidance when incorporating learning in health and well-being in your curriculum. It should be read together with the overarching <u>Designing your curriculum</u> section, which is relevant to learning and teaching through all areas of learning and experience (Areas).

#### Cross-curricular skills and integral skills

A curriculum must embed the mandatory cross-curricular skills and the integral skills which underpin the four purposes of the curriculum. The following are some key principles which settings and schools should consider when designing learning and teaching in the Health and Well-being Area of Learning and Experience (Area).

#### Cross-curricular skills

#### Literacy

Literacy is a fundamental enabler of well-being. Learning about and through literature has significant potential to provide learners with the means to communicate their feelings, develop relationships with others, and seek help and support. The role of communication in expressing emotions is fundamental. Literature has significant potential to support learners' **empathy**, mental health and emotional well-being.

Literacy provides learners with the opportunity to develop improved decision-making skills. Opportunities to critically engage with a range of texts can support learners' decision-making and support learners to articulate their views with greater confidence, further developing their values and identity which, in turn, can develop confidence and ambition.

Developing literacy skills, being able to organise writing and adapt language confidently, is important in enabling learners to apply for learning pathways and a preferred career.

#### Numeracy

Learning in this Area should provide opportunity to develop numeracy skills in the realworld context. Numeracy is a key enabler in making a number of informed decisions, in particular managing money and supporting good financial decision-making and critically engaging with social norms around money. Numeracy also plays a role in purchasing and preparing food to support nutrition.

#### **Digital competence**

Learning in this Area is fundamental to developing safe behaviour in relation to digital media and the online world. Learners should be encouraged to develop their understanding of the increasing influence of technology on their daily lives and the implications this may have for their health and well-being, in particular the possible impact on physical, mental and emotional health and well-being. Decision-making, risk assessment and safe and unsafe situations and interactions should all be considered in digital contexts. This includes relationships with others, online safety, legal implications and social influences online (including social media).

As technology develops, settings and schools need to maintain a current understanding of what learners are accessing or using and how they are going about this. Provision should allow learners to explore the vast array of opportunities that these technologies present, as well as developing the awareness and skills needed to be responsible digital citizens. Settings and schools should also consider how they promote positive engagement with media and the online world as well as how they prepare learners to deal with the challenges these can present.

#### Integral skills

#### Creativity and innovation

Learning in this Area provides learners with the opportunity to develop the confidence and openness to explore ideas, to consider the opinions of others, and the courage to express their own. Learners should be given opportunities to express themselves and develop creatively in physical activity including sport, and to generate ideas to create nutritious healthy meals. Learners will be encouraged to explore and pursue innovative thinking in respect of career pathways.

#### Critical thinking and problem-solving

Learning across the statements of what matters in this Area provides opportunities to develop critical analysis, evaluation and appraisal skills. Decision-making is heavily dependent on critical and logical processes such as analysing the benefits and risks of a course of action. Drawing on learning in this Area learners should be encouraged to develop responses and solutions to experiences they encounter and critically analyse the factors that influence decision-making, such as **social influences**, **values**, beliefs and **biases**.

#### **Personal effectiveness**

Learning in this Area should provide learners with opportunities to develop an awareness of, control over, and the ability to express their emotions: the skills required to develop emotional intelligence. Through gaining an understanding of the factors that impact on mental health and emotional well-being learners can be helped to manage their experiences and act with empathy, compassion and kindness for themselves and others. Learning should enable and support learners to develop good interpersonal skills, by providing an understanding of norms and attitudes; an ability to reject and challenge these and an understanding of differences and how these should be respected.

Learners should develop an understanding of the factors that influence decisionmaking, helping them to make considered, informed decisions that they are able to justify and explain while also understanding the risks and possible consequences of their decisions for themselves and others. This learning should help provide learners with the skills to critically evaluate learning and mistakes and identify areas for further development. Learning and experiences within this Area should provide opportunities for learners to develop the skills and attitudes which allow learners to be independent, to have healthy relationships, to know their rights and the rights of others, to know how to manage conflict, to recognise unhealthy relationships, to be safe, and to understand when and how to seek support for themselves and others.

Knowledge and understanding drawn from across learning in the statements of what matters can support **learners** to develop confidence and independence.

#### Planning and organising

Learning in this Area specifically seeks to provide learners with opportunities to build an awareness of, and to develop skills in, decision-making and goal-setting. Drawing on learning in this Area provides opportunities for learners to understand and explore how decision-making affects them and others, to understand and develop the skills to make collective decisions, and to critically evaluate factors and implications of decision-making. Learning in health and well-being should provide learners with the opportunities to plan and set short-term and long-term goals and to take steps to achieve these. Learning should also support learners to plan and implement sustainable, balanced and positive behaviours to support physical health and well-being. Learners should be encouraged to develop an understanding of emotions, behaviours and social influences, skills essential to building strong relationships.

#### Specific considerations for this Area

The five statements of what matters should be viewed holistically. When viewed together they encapsulate the fundamental elements which are the foundation upon which health and well-being can be developed. They are meant to act as lenses through which different topics and issues can be explored giving professionals the flexibility to identify those which are relevant to the needs of their learners, their setting or school and their community. When designing learning and teaching in this Area in the curriculum practitioners should ensure that they draw from across the statements of what matters wherever possible. There is considerable scope for overlap with the other Areas and it is important that planning for this Area should happen in collaboration with them.

This Area is an entirely new element of the curriculum in Wales. In addition to providing new and exciting opportunities, this will also present settings and schools with some new challenges. This section is intended to help guide settings and schools from the initial identification of priorities to putting it into practice.

Successful design, learning and teaching of the Area in the curriculum should be both underpinned and supported by the whole-school approach as the two go hand-in-hand. A whole-school approach to health and well-being should pervade all aspects of school life and be supported by school policies and practices. If there is not alignment between the two then learning in the Area would be compromised. For example, a healthy food offer in the school canteen can support the learners in their enjoyment and understanding about the importance of having a healthy, balanced diet. Similarly, learning about the benefits of regular physical activity will be enriched and embedded if there are plenty of opportunities throughout a school day to be physically active.

These are the key considerations which settings, schools and practitioners should consider when developing their curriculum:

#### 1. What are the needs of your learners?

#### Identify the needs of learners

Every setting and school will have a range of information available to help them carry out an analysis of need. For schools this will include School Health Research Network (SHRN) data, Welsh Network of Healthy Schools data, and the School Sport Survey. It is important that this process also draws upon information at a local, cluster-wide, regional and national level.

The elements of this Area of the curriculum need a sufficient degree of flexibility and it is important that flexibility is built into the design, and sufficient time is allocated to do this. Needs and priorities will change and learning and teaching in the Area should respond to these changes. It may be felt that there are times when it would be beneficial to use external organisations to provide support in planning and delivery on certain topics and issues. It should be noted that this should enhance rather than replace teaching. External organisations can also assist settings and schools to develop links with the wider community and support parental engagement.

#### Consider what influences learners' health and well-being

As well as considering learners' health and well-being, this process could consider the following.

- What are the drivers and influencers of learners' health and well-being?
- How do these drivers and influences impact on different aspects of learners' health and well-being?

These more specific questions below may be helpful in considering the above. They are not an exhaustive list but meant to help promote honest and open discussions which form an important part of the curriculum design process.

- What opportunities for physical activity will your learners find enjoyable and meaningful? What motivates them to engage in a variety of roles, responsibilities and environments (e.g. indoor, outdoor, in and around water)?
- What factors, influences and behaviours shape your learners' physical health?
- What is learners' understanding of the interconnections between their diet, sleep, physical activity and their health and well-being?
- What decisions do your learners make that influence their health and well-being and that of others? What decisions are they likely to make as they grow?
- How is your learners' health and well-being influenced by their interactions with digital technology? What opportunities should your learners have to develop healthy, safe and responsible use of digital technology and the online world?
- What experiences impact your learners' mental health and emotional well-being?
- What skills do your learners need to care for themselves and others?
- What are the different social influences and groups that impact on your learners, your setting or school and your wider community?
- What relationships do your learners have that influence their health and well-being?
- What skills do your learners need to develop healthy relationships?
- How are the different needs and experiences of learners interconnected?

#### 2. What topics, themes and activities will help respond to learners' needs?

Learners' needs can be addressed by a wide range of learning and teaching. When selecting these, settings, schools and practitioners should ask the following:

- What activities, topics and themes are most relevant to learners, their needs and context?
- What experiences, knowledge and skills will support learners to recognise how different drivers and influences may affect their health and well-being?
- What experiences, knowledge and skills will support learners to develop sustained, health-affirming and pro-social behaviours?

More specific considerations should include the following.

# What are the range of experiences and activities that can support learners to enjoy lifelong physical activity and care for themselves and others?

Positive learning experiences can support learners to value physical activity, including sport, which in turn can motivate them to lead physically active lives. Learner-centred pedagogies such as purposeful play, a multiskills approach, the Teaching Games for Understanding (TGfU) approach and the Sport Education Model (SEM) can all contribute to a learning culture where physical activity is enjoyed by all. Learners should also be supported to value the benefits of this, including social, recreational and performance aspects, as well as how it supports their physical health and well-being. These activities should also support the development of knowledge, understanding and transferable skills within and beyond the physical health element of this Area. Settings and schools should consider how opportunities, support the development and refinement of gross motor and fine motor movements, transferable skills and the ability to connect progress with perseverance and confidence. Realising progress in physical competence supports learners' motivation to persevere and supports their confidence to continue participating throughout life.

Learners should be supported to develop positive behaviours in their wider physical health and well-being. This could relate to a range of factors, including diet, substances, hygiene, infection, the physical environment, sleep and rest. Settings, schools and practitioners should consider what experiences will support learners to understand how these factors can influence their health and well-being, develop the skills to support healthy behaviours relating to these factors, and the confidence and motivation to support those behaviours for life. For example, developing skills to support a healthy balanced diet should consider how learners can develop the skills and the enjoyment of preparing food which forms part of a healthy balanced diet. Practitioners should support learners to recognise how these factors are interconnected and impact on the whole of their health and well-being, not simply its physical aspect. For example, enjoyment of activities outdoors will influence learners' mental health and emotional well-being.

Growing up will have a critical impact on learners' health and well-being and settings and schools should consider how they will support learners to understand and manage the developmental changes as well as how those changes affect learners in a range of different ways. Learners should be provided with appropriate opportunities to assess and manage risk so they can keep themselves and others safe. Schools should also consider what strategies their learners may need to be able to safely intervene to support others who may be at risk. This may include lifesaving skills and first aid.

#### How can settings and schools create and promote a culture where talking about mental health and emotional well-being is encouraged? What experiences, knowledge and skills will support learners to respond to their experiences? How can an understanding of the brain support this?

Learners need to understand the links between mental health and emotional well-being, how mental health and emotional well-being affects them and that our mental health can change over time. Schools should ensure that their whole-school ethos and support systems enable learners to openly talk not only about their mental health, feelings, thoughts and emotions but also those of others.

Settings and schools should ensure that learners have a deep appreciation of the importance of positive relationships and the benefits of seeking help. Settings and schools should provide opportunities for learners to explore the factors that impact on their mental health and well-being. These may include, but are not limited to, the importance of regular exercise, the effect of a balanced diet, how to respond to stress, and the impact of environments, including the online world.

#### What opportunities should your learners have to participate in authentic decisionmaking? How can you support learners to develop their decision-making skills?

Settings and schools should consider how to provide a range of opportunities for learners to make decisions, both individually and collectively. Earlier in progression these may include choices involving friendship, food and activities before moving onto more complex decisions with wider implications. Provision should also be made for learners to make decisions in areas such as careers, financial management, relationships and interactions with and through digital technology. The decision-making process may include problem-solving, identifying potential solutions, critically assessing information, appraising arguments for merit and engaging with and responding constructively to opposing opinions.

Settings and schools are encouraged to provide learners with opportunities to reflect on the short-term, medium-term and long-term implications of the decisions they make. It should recognise that learners do not necessarily have responsibility for many of the decisions affecting them and this responsibility grows over time. Reflecting on the impact of decisions not only on oneself, but on other people and wider society is important, particularly with regard to decisions that have been made by others or other groups. Learners will need to understand the implications and importance of developing sound decision-making in areas such as careers, finances and the law. In particular, learners will need to be aware that these are life decisions with long-term implications.

# How can learners be supported to engage with a range of social influences that affect their lives?

Settings and schools should identify opportunities for learners to engage with positive social influences as well as carefully considering how to reduce the impact of negative social influences. Settings and schools should take account of the role that social influences can play on learner behaviour and the influences that can promote and encourage healthy prosocial behaviours as well as those that lead to issues such as discrimination, racism or prejudice.

Settings and schools are encouraged to think about how to provide support for learners when negative social influences create difficulties for individuals and groups and celebrate those social influences that contribute to health and well-being. These may be more global influences that affect large numbers of learners, but could also include things that affect smaller groups of learners. Through a whole-school approach to health and well-being together with curriculum design, practitioners are encouraged to provide opportunities for learners to explore and critically evaluate how and why they choose to engage with particular social influences and how these can affect behaviour.

# What experiences could settings and schools offer to provide learners with an appreciation and understanding of the benefits of healthy relationships? How should settings and schools actively promote and model healthy relationships?

Settings and schools should consider the relationships that are familiar to learners such as family and friends, pets, animals, peers, professional, virtual, romantic, sexual, religious and spiritual, and those relationships which they may not yet be familiar with but are highly likely to encounter in their lives. This should include opportunities to develop relationships with people who have different backgrounds, experiences and characteristics to them. In order to form, maintain and develop healthy relationships for life, learners will need to invest time in those relationships and acquire an array of skills and dispositions.

Settings and schools should consider how they are supporting learners to develop the skills they need in order to build healthy relationships. These should include, but may not be limited to, open communication and discussion, acceptance, celebration, empathy, trust, managing mobile technology, give and take feedback, compassion, problem-solving, cooperation, negotiation, respecting others' views, values and rights, mediation, responding constructively and appropriately to conflict, understanding that relationships change and develop over time. While these concepts should be integral to the whole-school ethos practitioners should be aware that many of these will also need to be taught explicitly throughout the curriculum. They should make the most of opportunities to develop these skills as they naturally occur. Learners should be given time to reflect on, explore and critically evaluate their experiences, as well as to use their knowledge to manage their behaviour in situations they may encounter in the future to self-regulate.

# How can settings and schools support learners to recognise that relationships or aspects of relationships may not always be safe or healthy?

It is important that learners understand what may constitute an unhealthy or abusive relationship. They will need to recognise unwanted attention and learn how to respond appropriately. Learners should understand the importance of privacy and consent. They should be given opportunities to develop the knowledge and skills needed to seek help for themselves and others, and who to approach for support in a variety of situations, ranging from friends, family and teachers to external agencies and organisations such as Childline, Women's Aid, NSPCC, the police, counselling services and charities, health professionals, Child Exploitation and Online Protection (CEOP), etc. Safe behaviours may include appropriate touch, personal space and positive verbal communication, including consent. Unsafe behaviours may include physical, emotional, verbal, sexual and online abuse. Learners need to know that they have rights, including human rights and those in the United Nations Convention on the Rights of the Child (UNCRC), and that these should protect them from harm. They should understand the importance of equity and of recognising one another's rights in developing safe relationships.

#### 3. How can topics, themes and activities be considered holistically?

Topics, themes and activities should be considered holistically, considering different aspects of a learners' health and well-being. The statements of what matters are designed to be used as different lenses through which to look at and consider the same curriculum content.

Planning should begin by thinking about topics relevant to learners' needs and then exploring how the topic or theme can be used to deliver learning in each of the statements of what matters. The descriptions of learning can then support the development of learning and teaching.

For example, if harmful substances were identified as a focus area, then curriculum design would require an exploration of how the descriptions of learning for each of the statements of what matters can offer a particular way of approaching it. Initial thinking may identify the following links to the statements of what matters: the impact of harmful substances and sleep patterns, appetite, motivation to exercise, emotional well-being, impulsive decision-making and risk-taking, friendship groups, and the ability to distinguish between healthy and harmful relationships. The descriptions of learning can then be used to provide the framework upon which to build detailed learning.

Another example may be that the need to collaborate has been identified as a focus area and the following links may be developed: using physical activity as a vehicle for building collaboration, exploring the benefits of supporting one another on mental health and emotional well-being, making collective decisions and learning from mistakes, exploring how different social groups within a setting or school can identify commonalities, share goals and collaborate to build relationships with the wider community. Settings and schools should consider the nature of the learning experiences and the supporting pedagogy to ensure that themes and topics contribute to learners' progression. It is also important to remember that influences are not necessarily wholly positive or negative. Behaviours and relationships can have both healthy and harmful aspects. Learning and teaching should be designed to encourage positive behaviours. When identifying experiences, positive approaches are important. The approach to learning should ensure learners develop enjoyment and a positive perception of healthy and pro-social behaviours. It should not be about shaming specific behaviours or creating a long list of dos and don'ts. Learning and teaching should recognise that while understanding the impacts of different behaviours is important, this alone is very unlikely to influence learners' behaviours.

#### **Illustrating breadth**

The following are provided as examples of how you could explore different topical learning in this Area. These are illustrations only.

Learners can participate in a range of team and individual sports to support their understanding and application of positive health behaviours. This also supports the development of team-working, resilience and individual confidence. A study of sport can also unlock aspects of social history, politics, geography and science in Wales and across the world. Learning about behaviours, situations and conditions that affect physical health and well-being could include learning about substance misuse, the development of first aid skills and an understanding of health conditions. An understanding of diet and nutrition could be enhanced by a knowledge of food supply, both within Wales and internationally, and how it has changed over time.

#### Key links with other Areas

Links across Areas should be considered and drawn on to fully embed holistic learning. Settings and schools should consider if there are different elements of learning which could be considered together in order to support this. There are many links between this Area and other Areas.

#### Expressive Arts

The Health and Well-being Area of Learning and Experience provides opportunities for creative movement and dance as a physical activity and can enable learners to develop gross motor and fine motor movements to support participation in the arts' disciplines. Involvement in the expressive arts can enable learners to develop a sense of self, build confidence, and explore different forms of communication and relationships, which can support mental health and emotional well-being.

#### Humanities

These two Areas link together to deepen learners' knowledge and understanding of identity, communities, societies, social norms and values, and social influences. They support understanding of citizenship, rights, respect and equality. The Health and Well-being Area of Learning and Experience supports learners' understanding of how individual and collective decision-making can support ethical and sustainable responses to challenges and opportunities that are faced by humanity.

#### Languages, Literacy and Communication

These two Areas link together to provide learners with the skills to effectively communicate which in turn provide a foundation for developing healthy relationships. Physical and cognitive development will impact on the acquisition of speech and language and the development of fine motor movements, such as handwriting. Literacy skills allow learners to explore texts related to health and well-being. Reading and writing for pleasure also provides opportunities to improve the learner's sense of well-being.

#### **Mathematics and Numeracy**

One of the most important links is with the Health and Well-being Area of Learning and Experience and an example would be around financial literacy and risk. Financial literacy is provided for in the statement of what matters dealing with the number system. This is complemented in health and well-being where learning could explore financial literacy through risk and personal debt, and its consequences. Because of such close links, it is strongly recommended that both elements are taught in parallel.

The Health and Well-being Area of Learning and Experience also provides learners with the knowledge and understanding of the process of decision-making, including the implications of decisions and consideration of risk. Numeracy provides an important context in which to explore and support positive decision-making, particularly in respect of financial decisions.

Furthermore, the Health and Well-being Area of Learning and Experience provides opportunity to explore the role of numeracy in purchasing and preparing food to support nutrition and its role in measuring distance, weight and time.

#### Science and Technology

These Areas are inherently linked. Knowledge and understanding of biology, physical development, biological and sexual relationships and the link between physical and emotional health are fundamental to learning in the Health and Well-being Area of Learning and Experience. Learning how the brain works can help learners understand their thoughts, feelings and emotions. How lifestyle choices can impact the human body (including diet, drug use and exercise) can be considered, as well as the science behind hormones, sexual reproduction and human development in support of relationships and sexuality education (RSE). Technology is important to the health and well-being of learners, including supporting the preparation of healthy diets. Understanding how digital media works and how to use the online world safely and responsibly, exploring relationships in an online context and understanding social norms and influences in respect of technology all support stronger decision-making in relation to online safety, online bullying and promoting positive online behaviours.

#### **Cross-cutting themes**

#### Local, national and international contexts in this Area

The drivers and influences of learners' health and well-being may vary depending on local context and these should be considered when designing your curriculum. Learning should be informed by local, national and global trends, issues and factors which affect different aspects of learners' health and well-being.

The decision-making skills learners develop should enable them to understand and critically evaluate the impacts of their decisions locally, nationally and internationally in a wide range of contexts.

Learners should develop a range of relationships that enable them to value similarities and differences within their local communities and with different individuals and communities nationally and internationally.

The social influences that inform learners' may be local, national or international. They may also vary locally. Developing an understanding of the norms, values and cultures of local communities, national communities and international communities will help inform a learner's identity.

Through developing and modelling empathy, learners should be supported to become active citizens who engage pro-socially with each of these different contexts.

#### Careers and work-related experiences in this Area

Key decisions for learners will be those around careers. Through developing decisionmaking skills and developing an awareness of the impact of decisions upon oneself and others, learners can begin to recognise the relevance of learning, developing skills and interests on future life choices. In developing knowledge and understanding of the decisionmaking process learners can develop an understanding of the need to research and critically evaluate career choices, developing an understanding of the experiences, knowledge and skills required to pursue a preferred career or learning pathway. Careers and work-related experiences should be considered through the decision-making statement of what matters and other statements of what matters throughout progression. At the beginning of the continuum learners should engage with their likes and dislikes, choose activities based on their interests and explore different work-based roles. As they progress they should develop an awareness of a range of different opportunities that are relevant to their learning, skills and interests. They should be supported to set goals, and research information about potential pathways in order to help them to take steps to support their ambitions. Careers can also be considered through the perspective of other statements of what matters, for instance professional working relationships. The learning about careers in this Area should provide a foundation for learning about careers through and within all other Areas.

Drawing on learning in this Area, learners should be encouraged to develop knowledge, understanding and skills to adapt behaviours according to different situations and contexts. These skills could assist learners when applying for jobs and engaging in the world of work.

#### Human rights education and diversity in this Area

Understanding and valuing diversity is intrinsic to delivering learning in this Area and to developing knowledge and understanding of rights.

Learning in this Area specifically looks to provide opportunity for learners to develop knowledge and understanding of rights – individual rights, the rights of others, the impacts of rights on themselves and others, and the need to respect the rights of others. It also advocates learners being given the opportunity to experience exercising of their rights.

Learning across the statements of what matters in this Area provides opportunities to develop a detailed understanding of the diverse nature of people and to develop the skill and understanding to interact accordingly with people of different backgrounds and cultures. Learning enables opportunities to explore diversity of values, identities, behaviours and physical characteristics, and provides opportunities for learners to develop the characteristics to understand and respect diversity. It also provides opportunities for learners to understand that there are different social groups, situations and cultures and that these have different rules, social norms and attitudes, and opportunities for learners to understand how these differences influence values and behaviours.

### **Humanities Area of Learning and Experience**

### Introduction

The Humanities Area of Learning and Experience (Area) seeks to awaken a sense of wonder, fire the imagination and inspire learners to grow in knowledge, understanding and wisdom. This Area encourages learners to engage with the most important issues facing humanity, including sustainability and social change, and help to develop the skills necessary to interpret and articulate the past and the present.

The Area encompasses geography; history; religion, values and ethics; business studies and social studies. These disciplines share many common themes, concepts and transferable skills, while having their own discrete body of knowledge and skills. Learners may also be introduced to other complementary disciplines, such as classics, economics, law, philosophy, politics, psychology and sociology, if and where appropriate.

What matters in this Area has been expressed in five statements which support and complement one another, and should not be viewed in isolation. Together they contribute to realising the four purposes of the curriculum.

Humanities is central to learners becoming **ethical**, **informed citizens of Wales and the world**. In contemporary and historical contexts, investigation and exploration of the human experience in their own localities and elsewhere in Wales, as well as in the wider world, can help learners discover their heritage and develop a sense of place and cynefin. It can also promote an understanding of how the people of Wales, its communities, history, culture, landscape, resources and industries, interrelate with the rest of the world. Contemplating different perspectives will in turn help promote an understanding of the ethnic and cultural diversity within Wales. Taken together, these experiences will help learners appreciate the extent to which they are part of a wider international community, fostering a sense of belonging that can encourage them to contribute positively to their communities.

It is important that learners reflect upon the impact of their actions and those of others, and how such actions are influenced by interpretations of human rights, values, ethics, philosophies, religious and non-religious views. Through being encouraged to engage with, respect and challenge a variety of worldviews, as well as to understand how to exercise their democratic rights, learners can imagine possible futures and take social action. Such critical engagement with local, national and global challenges and opportunities past and present will help learners become **enterprising, creative contributors, ready to play a full part in life and work**.

As they explore their locality and Wales, as well as the wider world, learners can establish a solid base of knowledge and understanding of geographical, historical, religious, non-religious, business and social studies concepts. This exploration will encourage learners to participate in different methods of enquiry, evaluate the evidence that they find, and apply and communicate their findings effectively. These experiences, in and outside the classroom, will help them become **ambitious, capable learners, ready to learn throughout their lives**.

It is important that learners have opportunities to discuss and explore their personal perspectives on religious and non-religious worldviews, ethical challenges and social inclusion issues. Likewise, opportunities to explore the natural world, locally, within and beyond Wales, will help foster in them a sense of place and of well-being. These experiences will help develop learners' resilience, build independence, and increase self-confidence and self-esteem. This will support the development of **healthy, confident individuals, ready to lead fulfilling lives as valued members of society**. Body text here.

#### **Statements of what matters**

# Enquiry, exploration and investigation inspire curiosity about the world, its past, present and future.

The learners' journey through this Area will encourage enquiry and discovery, as they are challenged to be curious and to question, to think critically and to reflect upon evidence. An enquiring mind stimulates new and creative thinking, through which learners can gain a deeper understanding of the concepts underpinning humanities, and their application in local, national and global contexts. Such thinking can help learners to understand human experiences and the natural world better.

Appropriate disciplinary approaches, including digital humanities will help learners gather, justify, present, analyse, and evaluate a range of evidence. Interpreting and synthesising information will help learners build upon what they have already learned and further inform their understanding of the world. By thinking critically about their discoveries, learners can then draw informed conclusions, but also understand that some conclusions can only be partial or inconclusive and open to different interpretations. They will need to reflect carefully in order to improve their methodology and extend or deepen their enquiry.

Enquiry is more than an academic exercise; it enables reflection, which can help learners understand the human condition. This, in turn, can add meaning to learners' own lives and contribute to their sense of place and worldview.

This aspect of the Area will encourage the exploration of concepts, including questioning, evidence, evaluation, ethics and judgements.

# Events and human experiences are complex, and are perceived, interpreted and represented in different ways.

We encounter and make sense of the world though a variety of events and experiences. Humanities encourages learners to critically review the ways these events and experiences are perceived, interpreted and represented. As they form their own informed viewpoints and recognise those of others, learners can also develop self-awareness.

Learning how various worldviews and factors can influence their own and others' perceptions and interpretations will encourage learners to develop an appreciation of how contexts influence the constructions of narratives and representations. By exploring how and why interpretations may differ and by critical understanding of a range of interpretations and representations derived from a variety of evidence, they will be better placed to evaluate their validity.

This aspect of the Area will encourage the exploration of concepts, including seeking meaning, making judgements, ultimate and philosophical questions, representations, perspectives, interpretations, significance and validity.

# Our natural world is diverse and dynamic, influenced by processes and human actions.

Experiencing the wonder of the natural world can contribute to learners' spiritual development and well-being, and can help to cultivate in them a sense of place and sense of belonging, as embodied in the Welsh word cynefin.

Nurturing curiosity can help learners understand and appreciate how and why places, landscapes and environments in their locality and elsewhere in Wales, as well as in the wider world, are changing. This in turn will enable learners to identify what makes places and spaces distinct, and to develop an awareness of the interconnections between humans and their environment in both contemporary and historical contexts. Consequently, learners will be in a better position to make connections between the past and present, and to consider possible futures.

Developing an understanding of how human actions in the past and present can affect interrelationships between the natural world and people will heighten learners' awareness of how the future sustainability of our world is influenced by the impact of those actions. It will also encourage learners to understand, as producers and consumers, their own impact on the natural world. In addition, an exploration of a range of beliefs, philosophies and worldviews about the natural world can help learners realise how these influence people's interactions with the world.

This aspect of the Area encourages learners to explore concepts, including the interrelationships between humans and the natural world, cause and effect, change and continuity, significance, place, space and physical processes.

#### Human societies are complex and diverse, and shaped by human actions and beliefs.

An appreciation of identity, heritage and cynefin can influence learners emotionally and spiritually, and help build their sense of self and of belonging. Through an understanding of themselves, learners develop their own identity and an awareness of how they, as individuals, can shape the communities in which they live. Consequently, learners will come to realise that the choices we all make, individually and collectively, can have major impacts on society.

Through consistent exposure to the story of their locality and the story of Wales, as well as to the story of the wider world, learners can develop an understanding of the complex, pluralistic and diverse nature of societies, past and present.

Over time, places, communities and societies evolve, experiencing continuity and change that has affected, and continues to affect, their own and other people's lives. As they explore this, learners can come to appreciate how this evolution is driven by the interplay between a range of factors, including environmental, economic, social, political and cultural processes, human actions and religious and non-religious beliefs and worldviews. It will also help them build an understanding of the causes, consequences and significance of the changes and interrelationships that have shaped societies at different levels of development. Experiences in this Area can encourage a critical understanding of how societies are and have been organised, structured and led, in the learners' own locality and in Wales, as well as in the wider world. Societies are characterised by a range of cultural, linguistic, economic, legal and political norms and values. They are also dynamic, both driving and reacting to changes on a local, national and global scale. Learners can explore the connections and interdependence between such societies in the past and present, in the context of a globalised world. Further engagement will also encourage them to explore – and develop a tolerant and empathetic understanding of – the varied beliefs, values, traditions and ethics that underpin and shape human society.

This aspect of the Area encourages learners to explore concepts, including chronology, change and continuity, diversity, cause and effect, interconnectedness, community, identity and belonging, authority and governance.

# Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action.

Experiences in this Area can help learners develop an understanding of their responsibilities as citizens of Wales and the wider interconnected world, and of the importance of creating a just and sustainable future for themselves and their local, national and global communities. Exploration of the humanities encourages learners to be active, informed, and responsible citizens and consumers, who can identify with and contribute to their communities, and who can engage with the past, contemporary and anticipated challenges and opportunities facing them, their communities and Wales, as well as the wider world.

This Area will encourage learners to understand the interconnected nature of economic, environmental and social sustainability; justice and authority; and the need to live in and contribute to a fair and inclusive society. Experiences in this Area will also help learners develop an awareness of their own rights, needs, concerns and feelings, and those of others, and of the role such an awareness plays in the creation of a sustainable and interconnected world.

Questioning and evaluating existing responses to challenges and opportunities can encourage learners to develop as self-aware, informed, ethical global citizens, who critically reflect on their own and others' beliefs, values and attitudes. Experiences in this Area will also help learners to consider the impact of their actions when making choices and exercising their democratic rights and responsibilities. These experiences will also underline the need for learners to be able to justify their decisions when acting socially, politically, economically and entrepreneurially. This can enable learners to take committed social action as caring, participative citizens of their local, national and global communities, showing an understanding of and commitment to justice, diversity and the protection of the environment. By responding to challenges, and taking opportunities for social and sustainable action, they can create meaning and purpose in their own lives.

This aspect of the Area encourages learners to explore concepts, including citizenship, authority and governance, interconnectedness, justice and equality, enterprise, rights, and social action and responsibility.

#### **Principles of progression**

#### Increasing breadth and depth of knowledge

Progression in the Humanities Area of Learning and Experience (Area) is demonstrated by learners engaging with an increasing breadth and depth of knowledge and underlying concepts. Learners increasingly develop the capacity to organise and make links across propositional knowledge, to identify and develop more powerful underpinning concepts, and to make supported judgements in more complex contexts.

Learners connect new ideas and information to knowledge acquired from previous learning from within and outside school and use it to build an increasingly clear and coherent understanding of the world around them.

#### Deepening understanding of the ideas and disciplines within Areas

Progression within this Area is demonstrated in the early stages as learners experience holistic approaches to exploring the world around them and are supported in shaping an understanding of themselves in the world. Learners will move on to more focused awareness of the lives of others, in their own social context, elsewhere in the world and in different eras. As they move through the continuum of learning, learners have an increased understanding of the defining features of the constituent disciplines (including history; geography; religion, values and ethics; business studies and social studies) and how these can be brought together to provide different lenses through which to view issues and address questions or problems.

#### Refinement and growing sophistication in the use and application of skills

As learners experience, understand and apply increasingly complex concepts, they show an increasing accuracy and fluency in using a variety of skills identified in the descriptions of learning and statements of what matters.

As they progress, learners will be continually refining and developing a growing sophistication of key disciplinary skills including those relating to enquiry such as framing questions and using evidence to construct and support an answer and relating to representation and interpretation. Progression in this Area is demonstrated through an ability to work with an increasing number and sophistication of sources of information, and a growing understanding of how to resolve contradictory or conflicting accounts.

#### Making connections and transferring learning into new contexts

Progression in this Area is also characterised through more sophisticated use of relevant skills and the growing ability to transfer existing skills and knowledge into new, and increasingly unfamiliar contexts. As learners progress, they will be able to make links within and between periods and places, identifying similarities and differences, changes and continuities, and use the understanding of concepts to identify connections between new and previous learning. With greater understanding of the world, of other people and their values, in different times, places and circumstances, of their environment and how it has been shaped, learners will demonstrate greater ability to influence events by exercising informed and responsible citizenship.

#### Increasing effectiveness as a learner

As learners make progress within this Area, they will be asking increasingly sophisticated enquiry questions. They will show a greater independence in finding suitable information, making informed predictions and hypotheses, and making judgments including about reliability and utility. They will also become more able to effectively work with others, especially, but not limited to, taking part in social action.

### **Descriptions of learning**

Enquiry, exploration and investigation inspire curiosity about the world, its past, present and future.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can, through play, explore, discover and begin to ask simple questions and offer possible answers based on previous experiences. I have experienced a range of stimuli that have enthused and inspired me to imagine and be curious about my locality and Wales, as well as the wider world.	I have been curious and made suggestions for possible enquiries and have asked and responded to a range of questions during an enquiry. I have experienced a range of stimuli, and had opportunities to participate in enquiries, both collaboratively and with growing independence.	I can use my experiences, knowledge and beliefs to generate ideas and frame enquiries. I have actively engaged with a range of stimuli, and had opportunities to participate in enquiries, both collaboratively and independently.	I can use my experiences, knowledge and beliefs to generate ideas independently and frame enquiries, using a range of research approaches when required.	I can independently undertake a range of full and thorough enquiries, selecting the most effective approach and justifying my methodologies.
I am beginning to communicate my observations in simple ways.	I can collect and record information and data from given sources. I can then sort and group my findings using different criteria.	I can use appropriate methods to gather information related to my enquiries and I am able to interpret the information obtained in the context of the enquiry question.	I can analyse, present and reflect on my findings, describing patterns and explaining relationships across data and sources.	I can evaluate and reflect on my findings, synthesise information, analyse patterns and trends, predict possible outcomes (where appropriate), and present well-supported and justified conclusions.

		I can understand the difference between facts, opinions and beliefs, and consider how this may affect the importance and usefulness of evidence. I can reflect on the strengths and weaknesses of the approaches I have taken to my enquiries.		I can critically evaluate the usefulness, validity and reliability of qualitative and quantitative evidence. I can independently evaluate the success of enquiries, suggesting improvements and refining methods for future enquiries.
I am beginning to communicate my findings in simple ways.	ways and draw simple	, , , ,	I can draw considered and reasoned conclusions to my enquiries, while understanding that other people may form different conclusions from the available evidence.	I can make coherent and reasoned responses and judgements that take into consideration different viewpoints.

### Events and human experiences are complex, and are perceived, interpreted and represented in different ways.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can form and express simple opinions about my likes and dislikes.	something that is important to me,	I can form, express and discuss my own opinions on a range of issues after considering evidence and the views of others.	opinions and understand	I can appreciate a variety of perspectives on the world, recognise the limitations of my own perspective and have begun to challenge my values and opinions.

I can recognise and explain that my opi and the opinions of others have value. I can recognise tha opinions may chan over time. I am beginning to recognise other per feelings and viewpo about familiar even experiences.	nions people's opinions, viewpoints and interpretations from sources and evidence.	I can infer and evaluate opinions, viewpoints and interpretations from a range of sources and evidence in order to develop my own informed judgements.	I can analyse, explain and evaluate the validity of opinions, viewpoints and interpretations, considering how they are shaped and influenced by a variety of factors, and how they can change over time. Subsequently, I can develop my own informed and justified judgements.
	I can use evidence to explain how aspects of the past have been represented and interpreted in different ways. I can begin to understand that interpretations are influenced by identity, experiences, viewpoints and beliefs.	I can explain, using a range of evidence, why people have different interpretations and that interpretations are influenced by the availability, validity and credibility of evidence, identity, experiences, viewpoints and beliefs.	I can explain how and why a range of different interpretations are formed and how they may change over time. I can appreciate that responses to questions about life, experiences and the world are complex, and are often partial and inconclusive.

# Our natural world is diverse and dynamic, influenced by processes and human actions.

I have first-hand experience of the natural world and am beginning to recognise places which are familiar to me.	I can recognise the distinct physical features of places, environments and landscapes in my locality and in Wales, as well as in the wider world.	I can locate and give simple explanations for the distinctive features of places, spaces and landforms in my locality and in Wales, as well as in the wider world.	I can describe and explain the distinctive features of places, spaces and landscapes at a variety of scales, in my locality and in Wales, as well as in the wider world, along with the processes at work in them.	I can give comprehensive explanations for the distinctive features of places, spaces and landscapes at a variety of scales in my locality and in Wales, as well as in the wider world, along with the processes at work in them.
	I can describe how and where some places and environments are similar, and others are different.	I can describe spatial patterns of places, environments and landforms in my locality and in Wales, as well as in the wider world.	I can describe and explain why spatial patterns of places, environments and landforms may change over time in my locality and in Wales, as well as in the wider world.	I can give comprehensive explanations for the spatial patterns of places, environments and landforms at a range of scales and predict how patterns and trends may continue or change in the future in my locality and in Wales, as well as in the wider world.
	I can recognise the distinctive features of places, environments and landforms, and how these may change.	I can give simple descriptions of how places, spaces, environments and landforms have changed over time. I can give simple descriptions of the processes that lead to change in the natural world.	I can describe and explain how places, spaces, environments and landforms have changed over time and outline the processes that cause these changes in the natural world.	I can give comprehensive explanations and analysis of how and why places, spaces, environments and landforms have changed over time.

# Human societies are complex and diverse, and shaped by human actions and beliefs.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I am beginning to identify important events that have happened to me in the past. I am beginning to understand that some events have happened in the past, other events are happening in the present and that more events will happen in the future.	I can sequence events and I am beginning to understand that the past can be divided into periods of time. I can recognise similarities and differences between	I have an understanding that the past can be divided into periods of time. I also have an understanding that these periods have distinctive features and are different from one another, as well as different from the present. I can describe and explain similarities and differences between people's lives both in the past and present I can describe how some different characteristics of communities and societies have changed, within and across periods of time, in my locality and in Wales, as well as in the wider world.	I can make meaningful connections and comparisons between a broad range of historical periods of time in order to develop a chronological map of the past. I can use my knowledge and understanding to analyse and explain how different communities and societies have changed over time, in my locality and in Wales, as well as in the wider world.	I can give comprehensive explanations and analysis of the characteristics of different periods of time, recognising the dynamics of continuity and change over periods of varying lengths in order to develop an increasingly detailed chronological map of the past. I can use my detailed understanding of the nature and extent of change and continuity to explain and analyse how communities and societies have adapted and changed in my locality and in Wales, as well as in the wider world. I can also use this knowledge to consider possible futures.

I am beginning to understand that my actions and those of others have causes and effects.	I have explored some causes and effects of events and changes in my community over time.	I can identify and explain the main causes and effects of events in a range of contexts, and I can recognise how these impact communities and societies.	I can explain and analyse the causes of a range of events and changes in the past and present, and can appreciate how causes can often be interconnected and differ in importance. I can explain and analyse the effects and consequences of a range of events and changes in the past and present, and understand that they differ in importance.	I can critically evaluate how various causal factors interrelate over a range of timescales and in a range of contexts. I can subsequently appreciate how and why the significance of these factors may be contested. I can critically evaluate the consequences and significance of events and changes in a range of societies in the past and present.
I can show an awareness of who I am and that I am similar and different to others.	I can explore my identity and compare it with those of others, recognising that society is made up of diverse groups, beliefs and viewpoints.	I can explore a range of ways in which identity is formed and some of the influences that impact upon diversity in society.	I can analyse and explain how identity is formed. I can explain the connections between diverse societies.	I can evaluate the multifaceted nature of identity and explain how it influences people's interaction and impact within and across diverse societies in my locality and in Wales, as well as in the wider world.
I am beginning to develop my awareness of similarities and differences between people.	I have explored and am aware of diversity in communities.	I can describe and explain the ways in which my life is similar and different to others, and I understand that not everyone shares the same experiences, beliefs and viewpoints.	I can analyse and explain the diverse stories, beliefs and experiences of people in societies in my locality and in Wales, as well as in the wider world.	I can critically analyse a range of complex similarities, differences and inequalities between diverse societies in the past and present.

			I can evaluate the multifaceted nature of society and how diversity is valued.
	I have an understanding of how factors in the past and present have shaped my communities.	I can explain and compare how communities have been shaped by the past and I can explain how a range of factors contribute to this.	I can evaluate and compare how communities have been shaped by the past, and I can analyse and explain how a range of factors contribute to this.
I am beginning to understand how my community is governed and why there are rules.	I can understand and describe how my community is governed and how people are represented. I can describe the different ways that countries and societies, including Wales, have been governed in the past and present.	Wales operate both now and in the past, and I can	I can compare and evaluate local, national and global governance systems, including the systems of government and democracy in Wales, considering their impact on societies in the past and present, and the rights and responsibilities of citizens in Wales.
	I can describe some of the relationships, links and connections between a range of societies.	I can analyse the importance of the relationships, links and connections between a wide range of societies, and I can draw meaningful comparisons and contrasts between them.	I can evaluate the significance of the relationships and connections between a wide range of societies, along with their interdependencies.

Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I am beginning to understand that we need to respect others.	I have an awareness of what is right and wrong and that my actions should reflect that. I can understand that not everyone is treated fairly. I am beginning to understand what human rights are and why they are important. I can understand that we need to respect the rights of others.	I have an understanding that injustice and inequality exist in societies. I also have an understanding of what human rights are and why they are important to me and other people. I can explain who is responsible for upholding rights in my locality and in Wales, as well as in the wider world. I also have an understanding that some people are denied their rights. I can recognise that there is a difference between wants, needs and rights.	I can explain and analyse why injustice and inequality exist and can do so in a range of contexts. I can explain the importance of the roles played by individuals, societies, social movements and governments in defending people's human rights. I can explain the difference between wants, needs and rights, and why some people are denied their rights.	I can evaluate the underlying causes of injustice and inequality in a wide range of contexts in the past and present, and how they impact on human rights issues. I can evaluate the causes of human rights violations and the various factors that undermine or support people's rights. I can explain and evaluate the difference between wants, needs and rights. I can evaluate the importance of the roles played by individuals, societies, social movements and governments respecting and defending people's human rights.

	I am beginning to appreciate and care for living things and my own environment. I can take care of resources and not waste them, and I am conscious of the importance of creating a sustainable future.	I can understand that there are a range of factors that influence people's behaviour, actions and decisions. I can understand the consequences of my actions and the actions of others, and how these affect local, national and global issues.	I can explain the connections between past, present and anticipated challenges and opportunities faced by people in my locality and in Wales, as well as in the wider world. I have an understanding of my own and others' environmental, economic and social responsibilities in creating a sustainable future.	I have built a detailed understanding of what it is to be an ethical, informed citizen and can critically evaluate my role as one, recognising my responsibilities and those of others towards society, the environment and creating a sustainable future.
I am beginning to understand that my actions and those of others have consequences.	I can recognise the importance of the different rules, roles and responsibilities within the various communities to which I belong.	I can understand that there are a range of factors that influence my and other people's behaviours, actions and decisions, and that these include ethical and moral judgements and viewpoints. I can understand the consequences of my actions and the actions of others, and how these affect my locality and Wales, as well as the wider world.	I can analyse and explain that there are a range of factors that influence my and other people's behaviours, actions and decisions, and that these include ethical and moral judgements and viewpoints. I can make decisions, identify opportunities and plan appropriate action to make my voice heard.	I can evaluate how people's different beliefs, perspectives and experiences impact upon moral and ethical action in response to past, present and anticipated challenges and opportunities. I can critically examine my attitudes, assumptions and behaviours, along with the actions of others. I can also critically examine how these affect my locality and Wales, as well as the wider world.

	I can participate in decision-making, and I can share opinions and evidence with decision- makers and elected representatives in my community.	I can discuss and challenge viewpoints of decision-makers and elected representatives in my community and at a national level. I can analyse and explain the impact of decisions made by individuals, local, national or global governance, and non- governmental organisations on people, their rights and the environment.	I can explain the importance of the role played by groups, governments, businesses and non-governmental organisations in the creation of a sustainable future, and how they impact on people and their rights and on the environment.
I can contribute actively and constructively to my community. I can recognise that my actions and those of others impact upon communities and the environment.	I have planned and taken an active role in response to challenges and opportunities in my local community, or in Wales or the wider world, and I have done so individually or as part of a team.	I have identified, planned, reflected upon and evaluated the effects of action I have taken in my local community, or in Wales or the wider world, either individually or collaboratively.	I have identified, planned, reflected upon and evaluated the impact of action I have taken in my local community or in Wales or the wider world, either individually or collaboratively. Within that context, I critically examine my attitudes, assumptions and behaviours.

## **Designing your curriculum**

This section provides specific guidance when incorporating learning in humanities in your curriculum. It should be read together with the overarching <u>Designing your curriculum</u> section which is relevant to learning and teaching through all areas of learning and experience (Areas).

#### Cross-curricular skills and integral skills

A curriculum must embed the mandatory cross-curricular skills and the integral skills which underpin the four purposes of the curriculum. The following are some key principles which settings/schools should consider when designing learning and teaching in the Humanities Area of Learning and Experience (Area).

Learning in this Area could provide learners with the following opportunities.

#### Cross-curricular skills

#### Literacy

- Developing oracy through discussion, role play, questioning and presentations, and adapting oracy skills for audience and purpose while listening to and debating different viewpoints.
- Developing all styles of writing, e.g. describing, explaining, discussing, evaluating and creative writing, combined with the use of disciplinary-specific terminology and vocabulary.
- Accessing and exploring a range of texts from a variety of places and times to analyse evidence, to think critically, to infer meaning, and to evaluate interpretations and viewpoints.

#### Numeracy

- Developing numeracy skills in real-world contexts including collecting numerical data, through primary and secondary research methods.
- Analysing and representing data in a variety of ways.
- Supporting numeracy development though giving accurate directional instructions when map reading or developing their own maps and routes.
- Engaging with concepts such as chronological awareness and scale.

#### **Digital competence**

- Developing digital skills in areas such as the use of digital information systems (including geographical information systems), the use of digital sources, software to analyse and present qualitative and quantitative data.
- Exploring the impact of digital technology on societies and of the challenges and opportunities faced in the digital age.

#### Integral skills

#### Creativity and innovation

- Encouraging the presentation of information and findings in creative and innovative ways, and imagining possible futures based on the evidence.
- Encouraging openness to different ideas and ways of thinking, enabling the expression of reasoned opinions about these differences.

#### Critical thinking and problem-solving

- Developing the ability to think analytically and understand the past and present as well as to imagine possible futures.
- Collecting, reflecting and critically evaluating the use of sources and evidence.

#### Personal effectiveness

- Encouraging teamwork and being a reliable contributor by organising and carrying out enquiries.
- Evaluating, justifying and expressing considered responses in a variety of ways.

#### Planning and organising

• Encouraging the planning and organising of investigations, setting aims, objectives and success criteria, gathering and utilising a range of evidence, and reflecting on methods.

#### Specific considerations for this Area

School curricula should promote a thorough understanding of the statements of what matters which are designed to support the development of a more connected approach to learning. They are structured around learners developing an increasingly sophisticated understanding of key concepts which enables them to see beyond knowledge as being a list of unconnected facts.

The statements of what matters should be used holistically to provide a broad and deep platform to support learners through their humanities educational journey. A curriculum should not treat the statements of what matters in isolation, nor do they need to be addressed in a particular order or combination. The first statement of what matters champions enquiry and discovery within the Area, while the second encourages learners to explore and consider how they and others view, interpret and represent human experiences. The third and fourth statements of what matters focus on the key aspects of understanding in this Area, namely of people's relationship with the natural world and with each other. The final statement of what matters places a new emphasis on the individual's role and action in response to the challenges and opportunities facing humanity.

The statements of what matters refer to the need for consistent exposure to the story of learners' locality and the story of Wales, as well as to the story of the wider world, to enable learners to develop an understanding of the complex, pluralistic and diverse nature of societies, past and present. Learners should be grounded in an understanding of the identities, landscapes and histories that come together to form their cynefin. This will not only allow them to develop a strong sense of their own identity and well-being, but to develop an understanding of others' identities and make connections with people, places and histories elsewhere in Wales and across the world. Local, national and global contexts are integral to the Area and form part of the key principles described below relating to the choice of content.

#### Approach to design

There is flexibility in how a school may decide to structure its' curriculum, such as an integrated, multidisciplinary, interdisciplinary or disciplinary approach. Across the learners' journey from 3 to16, schools should provide a broad and balanced curriculum of knowledge, skills and experiences linked to history; geography; religion, values and ethics; business studies and social studies. A fundamental aspect is a professional understanding of the purpose of different disciplines and their interrelationship within this Area.

Schools curriculum design should consider the following key principles when selecting content:

- local, national and the wider world perspectives
- coverage/range
- coherence
- rigour
- focus
- sensitivity.

#### Local, national and the wider world perspectives

- Ensure consistent exposure to local, national and international contexts at different stages of development – it should not be the case that the youngest learners should focus exclusively on local studies and only the oldest learners focus on the international perspective; when appropriate and meaningful, learners should have opportunities to ground their understanding of an issue in their locality and of their own cynefin, and relate it to Wales and international contexts.
- Explore Welsh businesses, cultures, history, geography, politics, religions and societies.

#### Coverage/range

- Select a range of periods that have had considerable effects on humanity and the world in the past and present.
- Select a range of events, ideas, beliefs, people and processes that have had considerable effects on humanity and the world in the past and present.
- Focus on the experiences of ordinary people, including those who have traditionally been underrepresented.
- Select a range of contemporary events and changes of moral, political, social, economic, religious, environmental or cultural significance there can be a flexible approach to studying historical periods, and it is not the case that learners at particular progression steps should study periods in chronological order.

#### Coherence

• Ensure topics are sequenced to reflect the logic of the academic disciplines, enabling progression of conceptual understanding. Topics should seek to develop an increasingly sophisticated and deepening level of conceptual understanding and enable learners to make connections. Settings/schools should avoid an untheorised, episodic approach which jumps between unconnected topics.

#### Rigour

• Select challenging topics to enable deep thinking and reflection.

#### Focus

• Select a limited number of topics in each year to ensure the depth and quality of learning, where topics may overlap in order to reinforce key concepts.

#### Sensitivity

• Respond sensitively and insightfully to religious and non-religious worldviews about society, communities and cultures, and understand how these can be interpreted in different times, cultures and places.

#### Disciplinary concepts and contexts

The subjects within this Area share many common themes, concepts and transferable skills, while also having their own discrete body of knowledge and skills. The content, concepts and skills outlined in this Area are interconnected. The disciplines in this Area provide a variety of lenses through which to view the human experience. The statements of what matters encourage a holistic approach to learning.

#### History

School curriculum design should:

- develop an understanding of the discipline and its value
- develop understanding of, and respect for, the notion of truth and for people in the past
- develop an appreciation of the past on different scales, which allows learners to orientate themselves in time
- develop historical interpretation understanding and source-based skills
- develop rich content across the time periods, through which learners can develop an understanding of chronology through exploring cause and effect, change and continuity, similarity and difference, interpretations, the use of evidence and historical significance
- develop a rich context for exploring the concepts of governance, economy, power, leadership, diversity; culture, ethnicity, equality and inequality, justice, rights, conquest, social, political and economic ideologies, social organisation and structures, trade, agriculture and industry, power and protest, peace, conflict and cooperation, revolution, devolution and empire
- expose learners of all ages to a range of historical periods on a local, national and global scale, making the links and connections that support the development of a detailed chronological 'map' of the past.

## Geography

School curriculum design should:

- develop an understanding of the discipline and its value
- provide rich content for exploring physical and human landscapes, and a context for the causes and consequences of physical and human inter-relationships and interdependence which characterise our modern world
- provide a rich context for exploring the issues of sustainability, climate change, energy choices, nature, natural hazards and disasters and hazard risks, pollution, scarcity of natural resources, food security, population, identity, ethnicity, migration, settlements, globalisation, consumerism and trade, initiatives to tackle poverty, inequality and injustice, contrasts between countries at different levels of development
- equip learners with the skills to question, use and analyse maps, images, and Geographical Information Systems
- equip learners with the skills to formulate research questions, and to collect, manipulate and present data so they can evaluative and think critically about problems and issues.

## Religion, values and ethics

School curriculum design should:

- develop an understanding of the discipline and its value
- provide rich contexts for learners to be curious, to explore ultimate questions, and to search for an understanding of the human condition, as well as providing opportunities for learners to reflect, and to experience awe and wonder, in a range of meaningful real-world contexts
- develop rich contexts for enquiry into the concepts of religion, worldview, secularity, spirituality, life stance, identity and culture to develop learners' well-rounded understanding of religious and non-religious worldviews
- provide rich contexts for engaging with concepts of belief, faith, truth, purpose, meaning, knowledge, sources of authority, self, origin, life, death and Ultimate Reality which enables learners to develop an understanding of personal and institutional worldviews about the nature of life and the world around them
- develop rich contexts for exploring the concepts of identity, belonging, relationships, community, cynefin, diversity, pluralism and interconnectedness which can enable learners to gain a sense of self and develop spirituality
- explore the concepts of equality, sustainability, tolerance, freedom, prejudice, discrimination, extremism, good and evil which can give learners an insight into the challenges and opportunities that face societies
- reflect the concepts and contexts of religiosity, practice, ritual, tradition, worship, sacredness, symbolism and celebration to develop learners' understanding of lived religion and belief
- provide rich contexts for exploring the concepts of ethics, morality, justice, responsibilities, authority, humanity, rights, values and social action
- develop an understanding of lived religion and belief through the exploration of the key concepts.

## Social studies

School curriculum design should:

- develop an understanding of the discipline and its value
- encourage conceptual understanding of the world by learning about people and their values, in different times, places and circumstances
- provide rich contexts to explore social issues, identity, rights and responsibilities, and social organisation
- encourage active participation and engagement with social issues through social enquiry, discussions and social action
- develop an understanding of how systems of government in Wales operate and affect people's lives, and how they compare with other systems
- explore the concepts of governance, rights, equality, inequality, ethnicity, gender and poverty.

#### **Business studies**

School curriculum design should:

- develop an understanding of the discipline and its value
- expose learners to the economic reality that shapes the Welsh and global economies, enabling them to appreciate that this reality is constantly changing and to appreciate the impact it has on people's lives and the environment
- examine the strengths and areas for improvement, successes and failures of businesses and economies, while developing an understanding of the factors that shape the prosperity of communities and thereby people's prospects for the future
- explore the current Welsh economy, including consumption, production, the welfare of people at work, the impact of innovation and technology on businesses and the environment, and the effects of demographic change to the workforce.

## Considerations for provision of learning experiences

This Area provides rich opportunities for learning beyond the school walls. School curriculum design should allow learners of all ages to experience a range of stimuli that enthuse and inspire them to imagine and be curious, and to explore, discover and question through the following.

#### A range of opportunities to learn outdoors to:

- experience and reflect on the wonder of the natural world
- engage with a variety of landscapes, historical and geographical features, environments and places
- learn in local natural spaces and historical sites
- conduct enquires and fieldwork both independently and collaboratively, in partnership with organisations, groups and individuals when appropriate
- engage with historical, cultural and religious sites, including places that are significant to those whom faith and belief are important.

## A range of opportunities to visit and explore including:

- cultural and heritage sites, e.g. ancient monuments, religious sites and historical sites that have particular potential to provide stimulating contexts for learning
- libraries, archives and museums
- places of political, religious or spiritual significance
- businesses and places of work
- virtual venues that have particular potential to provide stimulating contexts for learning.

#### A range of opportunities to engage with:

- structured enquiry and cooperative learning
- artefacts and texts of historic and religious significance
- digital and physical media and technology
- stories, art, drama, dance, music and food that have particular potential to provide stimulating contexts for learning
- individuals, experts, groups and organisations that have particular potential to provide stimulating contexts for learning
- heritage professionals and developing a recognition of value of heritage sites /galleries/museums
- people who experience lived religion and worldviews
- political, business, community and/or cultural leaders
- groups and organisations such as charities, pressure groups and non-profit organisations.

#### A range of opportunities to observe or participate in:

- key celebrations, traditions and the diverse cultures in Wales
- formal and informal debates
- enterprise and entrepreneurial activities
- social action projects
- key celebrations, traditions and ways of life in the wider world.

#### Illustrating breadth

The following are provided as examples of how you could explore different topical learning in this Area. These are illustrations only.

Learners could explore the evolution of democratic thought and structures that led to the establishment of the Senedd, from Ancient Greece via the American Declaration of Independence and the changing UK constitution. Local, Welsh and world history are connected, shaped and appreciated through events such as Glyndŵr's Rising, the Spanish Civil War and the World Wars of the twentieth century. The climate emergency can be better appreciated by exploring the industrial revolution, the distinct geography and topography of Wales, and international relations. As informed citizens, learners will explore how government and decision-making works in Wales and beyond, and be empowered to contribute, scrutinise and challenge.

#### Key links with other Areas

School curriculum design should focus on genuine and authentic links between this Area and other Areas

#### Expressive Arts

Art, music, dance, theatre, forms of media and literature are valuable pieces of evidence for enquiries in the humanities and are mediums for expression of people's interpretations and viewpoints. The natural world, the past and present all act as a stimuli and contexts in the Expressive Arts Area of Learning and Experience. Throughout the past and present the expressive arts have been important in shaping culture and societies. Exploring the arts from various times, cultures and societies, including from Wales (e.g. Eisteddfod), allows learners to develop their understanding of other cultures as well as their own. Exploration of social and ethical concepts, sustainability and business can act as a stimulus for creative work.

#### Health and Well-being

These two Areas link together to deepen learners' knowledge and understanding of identity, communities, societies, social norms and values, and social influences. They support understanding of citizenship, rights, respect and equality. The Health and Well-being Area of Learning and Experience supports learners' understanding of how individual and collective decision-making can support ethical and sustainable responses to challenges and opportunities that are faced by humanity in general and in Wales in particular.

#### Languages, Literacy and Communication

Languages and literature play a vital role in identity and can help to shape and influence the development of communities and societies. Literature provides valuable evidence for, and can be a focus of, enquiries in humanities. Learners can explore literature from a range of cultures and societies, in the past and present, through their locality, Wales and the world.

#### **Mathematics and Numeracy**

The Humanities Area of Learning and Experience provides authentic contexts for the application of mathematics and numeracy skills. Enquiries in the humanities will use a range of qualitative and quantitative data. Humanities enquiries will often include the collection of primary data using sampling methods, and the representation and analysis of data and statistics in a range of forms. Learners are provided with opportunities to sort and classify data, and to identify patterns, trends and anomalies. Supporting entrepreneurship, ratio and scale, finance, rounding and ordering will also be relevant.

#### Science and Technology

Both of these Areas have similar and yet distinct methods and principles of inquiry. However, field work, for example where learners observe living things in their natural habitats leading to the collection of data to measure and compare biodiversity, supports learning in both Areas. Knowledge of current and past scientific investigations and technological developments and their impacts on society, can also support learners in their ability to source and filter evidence. Scientific and technological developments have significant impact on human societies, and on our relationship with the natural world. Science and technology can offer solutions and responses to the challenges that humanity faces in the modern world. Other aspects of science and technology are intrinsically linked to humanities in terms of connections with, for example, physical geography and knowledge of natural materials and their processing, and these should be explored. The digital economy is a powerful influence in shaping modern societies, economies and people's lives.

#### **Cross-cutting themes**

#### Local, national and international contexts in this Area

Local, national and international contexts are integral to this Area and form part of the key principles relating to the choice of content.

#### Careers and work-related experiences in this Area

Careers and work-related experiences provide an important context for learners to undertake enquiry, exploration and investigation into the labour market past, present and future. This focus on labour market information, should see learners at the beginning of continuum being given opportunities to explore and gain an understanding of work locally and further afield. Later in the continuum an exploration of jobs of the past and why they no longer exist should take place and then an investigation and evaluation of the factors that may influence and shape occupations in the future. This learning challenges existing stereotypes, focuses on the importance of skills and knowledge in the world of work, raises aspirations and belief of learners in their potential future.

Schools curriculum design should consider fostering an understanding of employment rights, ethical entrepreneurship, business ethics, money lending/borrowing, and sustainable green industrial processes and practices. Learners can also use the knowledge and skills gained in taking part in work-related experiences to develop successful enterprise activities.

#### Human rights education and diversity in this Area

Experiences in this Area can help learners develop an understanding of their responsibilities as citizens of Wales, the diversity of Wales, and an awareness of how their own rights are influenced by interpretations of human rights, values, ethics, philosophies, and religious and non-religious views. In this Area there should be opportunities to develop understanding of the United Nations Convention on the Rights of the Child (UNCRC) and for encouraging learners to recognise their own and others' rights.

# Languages, Literacy and Communication Area of Learning and Experience

## Introduction

The Languages, Literacy and Communication Area of Learning and Experience (Area) addresses fundamental aspects of human communication. It aims to support learning across the whole curriculum and to enable learners to gain knowledge and skills in Welsh, English and international languages as well as in literature.

The four statements that express what matters in this Area should be addressed holistically. This means that different languages should be explored in relation to one another, so too the skills of listening, speaking, reading and writing. It also means that learning about and through literature should be seen as contributing to all aspects of learning about languages. The statements support and complement one another and together they contribute to realising the four purposes of the curriculum.

Learning and experience in this Area aims to enable learners to communicate effectively using Welsh, English and international languages. It aims to encourage learners to transfer what they have learned about how languages work in one language to the learning and using of other languages. This multilingual and plurilingual approach is intended to ignite learners' curiosity and enthusiasm and provide them with a firm foundation for a lifelong interest in the languages of Wales and the languages of the world; and thus to make them **ambitious, capable learners, ready to learn throughout their lives**.

This readiness to learn is further supported since effective language skills help learners to make sense of concepts across the curriculum, for example by enabling them to articulate their reasoning when solving problems and analysing information. Effective multilingual skills deepen this ability as they enable learners to respond in many more contexts.

Given that a key aspect of effective language learning is the willingness to experiment and take risks in trying out new structures, sounds and patterns, learning and experience in this Area can empower learners to be creative and to persevere when facing challenges. Together, these skills can build learners' confidence to grasp new opportunities and to adapt to different roles which in turn can develop them as **enterprising, creative contributors, ready to play a full part in life and work**.

In this Area, languages are seen as a key to social cohesion, which can promote better local, national and global understanding. The aim is to encourage learners to engage critically with languages and literature in order to help them develop not only their own sense of identity, but also an understanding of the relationship between their own cultures and communities and those of other people. This understanding can be deepened as learners are afforded opportunities to learn multiple languages. This linguistic knowledge and these skills are needed to participate confidently and empathetically in society, which contributes to developing learners **as ethical, informed citizens of Wales and the world.** 

Engaging with this Area also helps learners to become **healthy, confident individuals, ready to lead fulfilling lives as valued members of society** as the skills promoted through languages, literacy and communication are key to enabling learners to express themselves effectively, to be open to other people's points of view and to develop positive relationships.

## **Statements of what matters**

#### Languages connect us.

Languages connect us with people, places and communities. This Area is designed to equip learners, as citizens of a bilingual Wales in a multilingual world, with the ability to use Welsh, English and international languages. Meaningful learning experiences in a multilingual context go hand in hand with learning about one's own cultural identity as well as the cultural identities of others. Engagement with this Area can therefore foster in learners pride in their sense of identity and belonging to Wales as well as the world.

By raising an awareness of the diversity of languages from a young age, the aim is to enable learners to recognise similarities between languages and to embrace the differences between them. Learning and experience in this Area can support learners to develop an understanding of the origins, evolution and features of Welsh, English and international languages, providing them with a set of skills such as creativity, mediation, adaptability and empathy.

#### Understanding languages is key to understanding the world around us.

Languages and literacy are fundamental to human communication. They enable us to make sense of what is heard, read and seen, and thus to develop our understanding, empathy and our ability to respond and to mediate effectively.

This Area aims to provide learners with opportunities to experience spoken and written language, as well as images, in a range of forms and genres. The rich and varied nature of these experiences can improve learners' ability to become creative and enterprising in their use of Welsh, English and international languages. They can also help learners to develop the skills to become unbiased and critically-aware interpreters of what they hear, read and see in order to interact as capable, informed citizens of Wales and the world.

#### Expressing ourselves through languages is key to communication.

Clear and effective communication through spoken and written language is an important life skill. It calls for the ability to use and adapt language in a range of roles, genres, forms, media and styles and in a suitable register. In a bilingual and multilingual context, this also calls for the ability to choose an appropriate language and to mediate.

In this Area, learners should be given opportunities to speak and write in order to be effective as they interact, explore ideas, express viewpoints, knowledge and understanding and build relationships. The learning and experience supports them to develop an awareness of how they use language as they experience opportunities to express themselves for different purposes and audiences in both Welsh and English as well as international languages.

#### Literature fires imagination and inspires creativity.

Literature expands horizons. In all its forms it can inspire and motivate us, while also helping us to learn more about language and communication.

This Area provides learners with literary experiences that can engage them as listeners, viewers, readers, narrators and creators. These experiences support them to appreciate a creator's craft as well as develop their own creative skills. They should be encouraged to experience and respond to a variety of literature that gives them insight into the culture, people and history of Wales as well as the wider world. Through this, as their understanding of their own and other people's experiences, beliefs and cultures is enhanced, learners can develop their ability to demonstrate empathy. This in turn can contribute to their emotional and mental well-being. In all, the literary experiences offered aim to spark learners' imagination and creativity and help to build a lifelong love of literature.

## **Principles of Progression**

The descriptions of learning for Languages, Literacy and Communication Area of Learning and Experience (Area) are intended to reflect the pace and depth of learning in different contexts and have been developed based on a continuum or framework of progression in languages, starting with little or no language and working towards proficiency. Learners will have varying proficiencies in their languages and, to ensure a robust foundation for second and subsequent languages, early steps (such as grapheme-phoneme correspondence) are revisited in each language.

Descriptions of learning in this Area include a higher level of detail at early stages of learning than may be found in other areas of learning and experience. This reflects that these early literacy skills are foundations of effective learning across the curriculum.

The descriptions of learning for the 'Languages connect us' statement of what matters are the same for all learners in all schools. For the other statements of what matters in this Area, there are descriptions of learning for Welsh/English, for Welsh in English-medium settings/schools/streams and for international languages.

#### Increasing breadth and depth of knowledge

Progression in this Area is represented as a coherent continuum. The learner grows holistically in their understanding and purposeful use of languages, literacy and communication when listening and reading, when speaking and writing and when interacting and mediating in a wide range of contexts.

Learners develop an increasingly sophisticated understanding of linguistic concepts that support the more conscious and self-aware development of skills to communicate effectively through speech, writing, gestures, images or other media.

They also progress in their breadth and depth of conceptual knowledge by encountering ideas in languages and literature, initially in more personal and local contexts and moving as they progress to connect with more complex communications in a multilingual world. Learners thus acquire a gradually more nuanced understanding of different viewpoints and increasing command of the skills needed to interpret, evaluate, articulate and respond to differing perspectives.

#### Deepening understanding of the ideas and disciplines within Areas

Progression in this Area is a continuum of increasingly complex engagement with ideas and communicative purposes and of development of language awareness. These are demonstrated in:

- responding to communications when listening, reading, or receiving language in other ways
- producing them when speaking and writing or through other means of communication.

Drawing on a learner's whole linguistic repertoire – however uneven that may be – enables them to progress in all languages. Understanding linguistic concepts in the language of instruction, for example, can be applied to learning a new language, which facilitates progression in that language as well as improving understanding of the way in which their own languages work. While learners may be at different points of progression in different languages, a focus on plurilingualism allows them to call upon their knowledge of a number of languages to make sense of a spoken or written text, whatever their command of that language, and to increasingly understand and learn from the relationships between different languages.

#### Refinement and growing sophistication in the use and application of skills

Progression in the refinement and sophistication of skills moves from literal and simple communicative purpose to more abstract, inferred/implied and nuanced levels of meaning with more complex purposes. Learners gradually develop greater awareness of language and more sophistication in using this awareness to achieve intended purposes in interpreting and producing communications in speech or writing or through other means.

As learners experience, engage with, understand and apply increasingly complex ideas and language awareness, accuracy and fluency in using communication skills grow.

Progression in this Area is also seen in the production of language. As learners become more accomplished, they can adapt and manipulate language to communicate effectively to a range of different audiences. This allows learners to form and develop strong relationships and the confidence to use their voice in society.

Second language learners may use formulaic language with few mistakes initially and, as they progress and when being more ambitious and spontaneous in their use of language, they may appear to make more mistakes. This intrinsic part of successful language learning leads to becoming more fluent and accurate language users.

#### Making connections and transferring learning into new contexts

Progression in this Area has a significant inter-relationship with the learning in all other areas. The learner moves forward along the progression continuum partly through exposure to rich challenges and resources offered by other areas of learning and experience. The thinking needed to understand and to communicate all learning is closely related to that which enables learners to develop receptive, interpretive and expressive language skills. They progress in parallel in languages, literacy and communication in this Area and in disciplinary literacy in the other areas of learning and experience.

The ability to transfer existing knowledge and skills into new contexts is an integral part of progression in this Area. As learners develop an understanding of additional languages, patterns of language use are identified, adapted and applied in new contexts. Modes of communication are adapted for different audiences, and to different disciplinary contexts. Skills in learners' first and second languages enable learning in subsequent languages. As learners progress, they will be able to make links within and between ways of communicating, making good choices about effective methods of communication.

#### Increasing effectiveness as a learner

As they move along the continuum of learning, learners will build on basic linguistic skills to develop a capability that enables them to overcome a range of communicative challenges successfully.

These include, for example:

- asking increasingly sophisticated questions
- finding information independently
- making evaluative and critical judgements about the ideas and viewpoints and the means of communication in what they hear, read, and view
- using language effectively to convey their own ideas and viewpoints on various topics.

They will develop the language skills necessary to discuss and evaluate their learning in languages.

# **Descriptions of Learning**

# Languages connect us

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I am beginning to be aware of a link between language(s) and culture and am developing a sense of belonging.	I can recognise that there is a relationship between languages, culture and my own sense of Welsh identity.	I can understand that there are connections between language, culture and identity and that these differ within Wales and around the world.	I can understand how languages can provide a sense of belonging to a local and global community. I can explore and analyse how languages impact upon identity and culture and understand that learning them offers enhanced opportunities in Wales and in international contexts.	I can show an open attitude towards learning about different languages and the different cultures of Wales and the world. Through learning about languages, I can articulate how the association between languages and culture is preparing me for Welsh and global citizenship.
I am beginning to understand that there are different languages in my environment. I am beginning to talk with my peers in the language of the setting/school.	I can understand that people use different languages.	I can communicate in a growing range of languages.	I can use my knowledge of how languages work to support further language learning.	I can communicate, interact and mediate in multiple languages and identify myself as multilingual.

I am beginning to understand that there are similarities and differences between our languages.	I can recognise and discuss connections, commonalities and differences between the languages I speak and those that I am learning. I can understand how and why languages have evolved and are continually evolving.	I can use my knowledge of connections, commonalities and differences between languages to support my language learning skills. Through exploring the process of language evolution and etymology, I can improve my knowledge of language construction.	I can apply my knowledge of connections, commonalities and differences between languages to improve my communication. I can use my knowledge of language evolution and etymology to deepen my understanding of language construction.
	I can recognise and respect different accents and dialects.	I can adapt and be sensitive to variety within languages and understand that variety occurs within different social, regional and linguistic groups.	I have a positive disposition towards different accents and dialects and embrace language diversity.
I am beginning to draw on information presented in one language and convey it in my own words in another.	I can receive information in one language and adapt it for various purposes in another language.	I can apply my translanguaging skills to support my learning in familiar and new languages.	I can independently identify translanguaging opportunities to enhance my learning and communication in my languages.

# Understanding languages is key to understanding the world around us.

# Welsh/English

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can discriminate sounds, play with sounds and manipulate sounds both in my environment and in	I can listen to, understand and communicate the general meaning of what I hear.	I can listen to, understand and later recall in greater detail the general meaning of what I have heard.	I can understand and analyse general meaning and implied ideas.	I can understand and evaluate what I hear and read in different contexts across a wide range of language.
words.	I can listen to, understand and later	I can listen to and understand information about a variety of topics,		
I am beginning to discriminate phonemes aurally in different	recall what I have heard.	summarising the main points.		
positions.	I can understand information about a variety of topics,	I can listen to, identify and use cues to understand the general		
I can recognise and follow pictorial and/or spoken information	identifying main points.	meaning and implied ideas.		
and multi-step instructions about familiar topics and routines.	I can understand and respond to a range of questions and multi-step instructions in a variety of familiar and unfamiliar contexts.			

	I can use a variety of cues to predict the general meaning in a variety of familiar and unfamiliar spoken contexts.			
I can listen to others with growing attention.	I can listen to others and understand that they may have a different perspective from my own.	I can listen empathetically to different people's viewpoints on various subjects.	I can listen empathetically to different people's viewpoints on various subjects, using them to arrive at my own conclusions.	I can listen empathetically, respecting different people's perspectives and can critically evaluate them to arrive at my own considered conclusions.
I can enjoy sharing books and reading materials and handle them like a reader.	I can use grapheme- phoneme correspondences when reading.	I can read texts, choosing strategies which best help me understand them; these strategies may include working across my languages.	I can read a range of texts, choosing strategies to understand them, and to improve my own expression and communication.	I can employ a range of strategies to recognise and predict the meaning across a wide range of texts and from this enhance my own expression and communication.
sound of varying sizes to learn to read.	strategies to read with increasing fluency.	I can compare different things I read.	I can employ a range of strategies to summarise, synthesise and analyse	
I can segment and blend.	I can read different texts using a range of strategies to make meaning.		information to gain in- depth understanding of texts.	

<ul> <li>I can understand there is a one-to-one relationship between the printed and spoken word.</li> <li>I am beginning to develop my knowledge of grapheme-phoneme correspondence.</li> <li>I am beginning to recognise and read high-frequency words.</li> <li>I can use context and pictures to help me understand what I read.</li> <li>I am beginning to read hack my own writing</li> </ul>	I can recognise the features of different types of texts and use appropriate language to talk about them. I can find and use information from different materials that I read.			
back my own writing.	I can infer meaning from text and images.	I can use inference and deduction to understand texts and can consider the reliability of what I read.	I can use inference and deduction to understand more complex texts and can consider the reliability and impact of what I read.	I can use inference and deduction to gain in-depth understanding of complex texts, and can evaluate the reliability, validity and impact of what I read.

I can understand and use basic concepts in language. I have an awareness of how words are separated by spaces. I am beginning to have an awareness of how capital letters and full stops demarcate sentences.	I can read aloud with expression, paying attention to punctuation.	I can listen and read to gain an understanding of how grammar and punctuation affect meaning.	I can listen and read to build on my understanding of how grammar and punctuation shape sentences and whole texts.	I can use my knowledge of word construction, grammar, including syntax, and text organisation to support my understanding of what I hear and read.
I am beginning to ask and answer questions to clarify my understanding. I can respond to what I hear, read and see. I can talk about what I hear, read or see and express simple opinions.	I can respond to what I hear, read and see, asking questions and showing my understanding.	I can read empathetically to identify different people's viewpoints on various subjects.	I can read empathetically to identify different people's viewpoints on various subjects, using them to arrive at my own conclusions.	I can read empathetically to respect and critically evaluate different people's perspectives, using them to arrive at my own considered conclusions.

I can experiment with newly-learned vocabulary. I can develop my vocabulary through listening and reading and use these new words in a variety of contexts.	I can listen and read to build my vocabulary, develop my pronunciation and sentence structures and use these in my own communication.	I can listen and read to consolidate and develop my vocabulary and sentence structures and use what I learn accurately in my own communication.	I can listen and read to build an extensive range of general and specific vocabulary, and I can use them with precision in different contexts.
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# Welsh in English-medium settings/schools/streams

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can recognise and follow information and simple instructions about familiar topics and routines.	I can listen to, understand and later recall what I have heard. I can understand information about a variety of topics. I can use a variety of cues to predict the general meaning in a variety of spoken contexts.	I can understand the general meaning of what I hear and can communicate it in my language of choice. I can listen to and understand information about a variety of topics, recall it and summarise the main points in my language of choice.	I can listen and use cues to understand the general meaning of what I have heard and can summarise in my language of choice.	I can understand and evaluate what I hear and read in different contexts across a wide range of language.

	I can listen, understand and respond to a range of questions and multi- step instructions in a variety of familiar contexts.	I can use a variety of cues to predict the general meaning in a variety of familiar and unfamiliar spoken contexts.		
I can listen to others with growing attention.	I can listen to others and understand that they may have a different perspective from my own.	I can listen and read empathetically, recognising the differing perspectives of others.	I can listen and read empathetically and reflect on different people's perspectives to help inform my own thinking.	I can listen and read empathetically respecting different people's perspectives and can critically evaluate them to arrive at my own considered conclusions.
I am beginning to recognise and read high-frequency words that I encounter. I can use context and pictures to help me understand words.	I can use grapheme- phoneme correspondences when reading. I can use a range of strategies to read with increasing fluency. I can read different texts using a range of strategies to make meaning.	I can read texts, choosing strategies which best help me understand them. I can compare different things I read.	I can read a range of texts, choosing strategies to understand them, and to improve my own expression and communication. I can employ a range of strategies to recognise and predict the general meaning across a wide range of texts.	I can employ a range of strategies to summarise, synthesise and analyse information to gain greater understanding of texts and to enhance my own expression and communication.

	I can find and use information from different materials that I read.			
	I can infer meaning from text and images.	I can use inference and deduction to understand a text.	I can use inference and deduction to understand more complex texts and can consider the reliability of what I read.	I can use inference and deduction to gain understanding of complex texts, and can evaluate the reliability and impact of what I read.
	I can read aloud with expression, paying attention to punctuation.	I can listen and read, showing awareness of how grammar and punctuation affect meaning.	I can listen and read to build on my understanding of how grammar and punctuation shape sentences and whole texts.	I can use my knowledge of word construction, grammar including syntax, and text organisation to support my understanding of what I hear and read.
I can experiment with newly-learned vocabulary.	I can develop my vocabulary and pronunciation through listening and reading, and can use these new words.	I can develop my vocabulary and pronunciation through listening and reading, and use new words and phrases in a variety of contexts.	I can listen and read to build my vocabulary, develop my pronunciation and sentence structures, and use these in my own communication across a range of contexts.	I can listen and read to consolidate and develop my vocabulary and sentence structures and use these accurately in my own communication across a wide range of contexts.

# International languages

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
	I have heard international languages being used.	I can recognise high- frequency words and phrases and understand the general meaning in what I hear, read and see.	I can employ a range of strategies to recognise and predict the general meaning across a wide range of texts.	I can employ a range of strategies to recognise and predict the general meaning across a wide range of texts and can understand implied ideas.
		I can listen and read empathetically, recognising the differing opinions of others.	I can listen and read empathetically to gain different people's perspectives on various subjects.	I can listen and read empathetically to gain different people's perspectives on various subjects, using them to inform my own thinking.
		I can listen and read to build a bank of words and sentences and use these to improve my own communication.	I can listen and read to increase my vocabulary and can vary my sentence structures to improve my own communication.	I can listen and read to enhance my range of language and to improve my own expression and communication.
		I can listen and read to gain an understanding of how grammar and punctuation affect meaning.	I can listen and read to build on my understanding of how grammar and punctuation shape sentences and whole texts.	I can use my knowledge of word construction, grammar, including syntax, and text organisation to support my understanding of what I hear and read.

# Expressing ourselves through languages is key to communication.

# Welsh/English

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can produce many speech sounds accurately.	I can speak clearly, varying expression and gestures to communicate my ideas. I can use single and multi-clause sentences, making choices to meet the intended audience and purpose.	I can recognise the appropriate language for different audiences and purposes, varying my expression, vocabulary and tone to engage the audience.	I can select and adapt the appropriate language for a range of audiences and purposes, conveying meaning effectively to the audience.	I can convey meaning convincingly in a range of contexts so that the audience is fully engaged.
I can communicate meaning using extended speech and/or gesture. I am beginning to use appropriate language to talk about events in the past and future.	I can communicate using an increasingly varied and precise vocabulary. I can use single and multi-clause sentences. I can vary the types of sentences I use in my spoken language.	I can adapt and manipulate language and make appropriate choices about vocabulary, idiomatic language and syntax in order to express myself with fluency and clarity.	I can make informed choices about vocabulary, idiomatic language and syntax in order to express myself with fluency, clarity and accuracy.	I can make informed choices about vocabulary and grammar to enhance my communication skills.

	I can review my work and am beginning to use a range of familiar strategies and tools to improve my speaking and writing. I can explain where and why I have made any changes or corrections.	I can reflect on the quality of my expression and use a range of strategies to ensure greater clarity in my spoken, written and visual communication.	I can reflect on my use of strategies to improve the quality, accuracy and effects of my spoken, written and visual communication.	I can reflect critically on my use of language and can consider the effects of my spoken, written and visual communication objectively.
I am beginning to take turns in conversations, following the topic. I am beginning to ask and answer questions to clarify my understanding.	I can adopt a range of roles and manage my contributions appropriately. I can change how I communicate, depending on where I am and who I am with. I can use spoken language for different purposes. I can ask and answer questions and exchange ideas and information.	I can respond to others' points of view, seeking clarity, structuring arguments, summarising and explaining what I have heard, read or seen.	I can respond to others' points of view, summarising and evaluating what I have heard, read or seen, structuring arguments and challenging what others say with confidence and sensitivity.	I can evaluate and respond critically to what I have heard, read or seen.

I can communicate by making marks, drawing symbols or writing letters and words in a range of contexts. I am beginning to form letters correctly using an appropriate grip.	I can write legibly.	I can write legibly and fluently.	
I am beginning to write using familiar words and phrases. I can write words and phrases by using knowledge of letters and the sounds they represent.	I can spell common irregular words correctly. I can use my knowledge of letter sounds and patterns accurately in my spelling. I can attempt to spell more difficult words plausibly using a range of strategies.		
I have an awareness of how words are separated by spaces.	I can use familiar punctuation.		

I am beginning to have an awareness of how capital letters and full stops demarcate sentences.				
I can share ideas and feelings and express what I like and dislike. I can describe objects and events, building and extending my vocabulary.	I can explain information and share ideas, opinions and feelings using relevant vocabulary.	I can interact with others, talking and writing about my thoughts, feelings and opinions showing empathy and respect.	I can share my thoughts, feelings and opinions with others using a range of techniques for different effect and showing empathy and respect.	I can communicate my thoughts, feelings and opinions in challenging and contentious contexts showing empathy and respect.
I am beginning to understand that writing can be for different purposes and audiences.	I can talk to plan writing and write for different purposes and audiences.	I can use familiar idiomatic language and appropriate register in my communication.	I can choose idiomatic language and appropriate register in my communication to enrich my expression.	I can use sophisticated idiomatic language and appropriate register in a range of contexts.
I can contribute to shared writing for different audiences and purposes.	I can organise my writing into a logical sequence. I can write using an increasingly imaginative, varied and precise vocabulary.			

I am beginning to communicate using text, image, sound, animation and video.		
I can use familiar words and phrases and experiment with newly-learned vocabulary.		

## Welsh in English-medium settings/schools/streams

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can produce many speech sounds accurately. I can choose to talk with my peers in Welsh.	I can speak with expression and gestures to communicate my ideas.	I can use and adapt familiar language, varying vocabulary and tone to suit the audience.	I can select and adapt the appropriate language for a range of audiences and purposes, conveying meaning effectively to the audience.	I can convey meaning convincingly in a range of contexts so that the audience is fully engaged.
I can communicate meaning through speech and gesture.	I can communicate using an increasingly varied vocabulary. I am beginning to use appropriate language to talk about events in the past and future.	I can adapt and manipulate language and make appropriate choices about vocabulary, idiomatic language and syntax in order to express myself.	I can make informed choices about vocabulary, idiomatic language and syntax in order to express myself.	I can make informed choices about vocabulary and grammar to enhance my communication skills.

	I can review my work and am beginning to use a range of familiar strategies and tools to improve my speaking and writing.	I can reflect on the quality of my expression and use a range of strategies to ensure greater clarity in my spoken, written and visual communication. I can explain in my language of choice where and why I have made any changes or corrections.	I can reflect on my use of strategies to improve the quality, accuracy and effects of my spoken, written and visual communication.	I can reflect critically on my use of language and can consider the effects of my spoken, written and visual communication objectively.
I am beginning to ask and answer questions.	I can adopt a range of roles and manage my contributions appropriately. I can change how I communicate, depending on where I am and with whom. I can use spoken language for different purposes. I can ask and answer questions and exchange ideas and information.	I can respond to others' points of view.	I can respond to others' points of view by seeking clarity, structuring arguments, summarising and explaining what I have heard, read or seen.	I can respond to others' points of view, summarising and evaluating what I have heard, read or seen, structuring arguments and challenging what others say with confidence and sensitivity.

	I can spell high- frequency words correctly. I can use my knowledge of letter sounds and patterns to support my spelling.	I can attempt to spell more difficult words plausibly using a range of strategies.		
I can contribute to shared writing for different audiences and purposes. I am beginning to communicate using text, image, sound, animation and video.	I can talk in my language of choice to plan writing for different purposes and audiences.	I can plan and write for different purposes and audiences. I can organise my writing into a logical sequence.		
I am beginning to express my feelings.	I can share ideas, and express opinions and feelings using relevant vocabulary. I can describe events, building and extending my vocabulary.	I can interact with others, talking and writing about my thoughts, feelings and opinions showing empathy and respect.	I can share my thoughts, feelings and opinions with others using a range of techniques for different effect and showing empathy and respect.	I can communicate my thoughts, feelings and opinions in challenging and contentious contexts showing empathy and respect.

I can use familiar words and phrases and experiment with newly-learned vocabulary.	appropriate register in my communication.	<b>•</b> •	I can use idiomatic language and appropriate register to enhance my expression in a range of contexts.
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## International languages

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
	I have experienced opportunities to use international languages.	I can communicate using familiar phrases and sentences.	I can convey meaning by using vocabulary and language patterns that I have learned, and can apply them to new situations.	I can select the appropriate range and register for different audiences and purposes, varying my language to engage the audience.
		I am beginning to reflect on my language use in order to improve the quality of my communication.	I can reflect on my language use and can apply familiar strategies to improve the quality of my spoken, written and visual communication.	I can reflect critically on my language use and can make informed choices about vocabulary, idiomatic language and syntax in order to express myself with clarity.
		I am beginning to interact with others, sharing information, feelings and opinions.	I can express and justify my thoughts and ideas.	I can respond to and challenge others' points of view, seeking clarity and structuring arguments.

		I can interact with others, sharing my points of view with empathy and respect.	I can communicate my thoughts, feelings and opinions in contentious contexts showing empathy and respect.
	I can construct my own sentences using the vocabulary and patterns I have learnt.	I can adapt and manipulate language to build sentences, using increasingly varied vocabulary.	I can use my knowledge of grammar, including syntax, and a wide range of vocabulary, to enhance my independent communication.

## Literature fires imagination and inspires creativity

## Welsh/English

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can join in with familiar songs, rhymes, stories and poems. I can retell stories. I can respond creatively to the range of literature I hear, read or view.	I can listen to and remember poetry, drama and prose. I can retell stories creatively. I can use my imagination to respond to and adapt literature to create my own work.	I can comment on literature and make connections between what I hear, read and view. I can use my knowledge of writing styles and the features of different literary genres to create my own work.	I can explore a wide range of genres, experimenting with language choices and techniques for my own creative purposes.	I can engage with a wide range of literary genres in depth in order to explore and craft my own work.
I can use familiar words and phrases and experiment with newly- learned vocabulary.	I can use my imagination to create my own literature.	I can use my imagination and experiment with language to create my own literature.	I can use my imagination and experiment with different creative forms and techniques to create my own literature.	I can experiment with and craft my own literature.

I can respond to what I hear, read and view and can express simple opinions on it. I am beginning to ask and answer questions to clarify my understanding.	I can respond to what I hear, read, and view, asking questions and showing my understanding. I can recognise the features of different types of literature and use appropriate language to talk about them.	I can consider the plot, character, theme and context of literature I experience supporting my ideas and opinions with evidence from the literature. I can make connections between what I hear, read and view.	I can explore, analyse and compare key ideas using relevant terminology, supporting my views with relevant textual detail.	I can critically evaluate key concepts and the impact of language choices and techniques on the reader/viewer using an assured selection of relevant textual detail.
	I am beginning to show empathy with characters in literature.	I can show empathy when responding to literature and understand that others may have different views from mine.	I can appreciate literature, showing empathy and understanding that literature can be interpreted differently.	I can appreciate literature, showing empathy when evaluating different interpretations of literature, including my own.

## Welsh in English-medium settings/schools/streams

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I have experienced literature. I can join in with familiar songs, rhymes, stories	I have experienced a range of literature. I can listen to and remember poetry,	I can listen to and remember poetry, drama and prose and can adapt them creatively.	I can use my knowledge of writing styles and the features of different literature to create my own work.	I can explore a wide range of literature experimenting with language choices and techniques for my own creative purposes.
and poems.	drama and prose.			

I am beginning to respond to literature I hear and view.	I can retell stories. I can use my imagination to respond to and adapt literature.	I can retell stories creatively. I can use my imagination to respond to literature. I can respond to what I hear, read and view expressing opinions and showing my understanding in my language of choice.		
I can use familiar words and phrases and experiment with newly- learned vocabulary.	I can use my imagination to create my own literature.	I can use my imagination and can experiment with language to create my own literature.	I can use my imagination and can experiment with different creative forms and techniques to create my own literature.	I can experiment with and craft my own literature.
I am beginning to respond to what I hear and view.	I can respond to what I hear, read and view and express opinions in my language of choice. I am beginning to ask and answer questions to clarify my understanding.	I can respond to what I hear, read and view, asking questions to show my understanding. I can recognise the features of different types of literature and use appropriate language to talk about them.	I can consider the plot, character, theme and context of the literature I experience, supporting my ideas and opinions with evidence from the text. I can make connections between what I hear, read and view.	I can explore, analyse and compare key ideas using relevant terminology, supporting my views with relevant textual detail.

I am beginning to show empathy with characters in literature.	I can show empathy when responding to literature and understand that others may have different views from my own.	I can appreciate literature showing empathy and understanding that literature can be interpreted differently.
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## International languages

Progression step 1	Progression step 2	Progression step	Progression step 4	Progression step 5
	I have experienced literature from other cultures and in international languages.	I can join in with familiar songs, rhymes, stories and poems. I can respond creatively in my language of choice to literature in the international language.	I can listen to and remember short excerpts from literature in the international language, and can retell in my language of choice what I have heard, read or seen using my imagination.	I can respond creatively and critically in my language of choice to the main features of what I have heard, read or seen in the international language.
		I can use familiar words and phrases and experiment with newly- learned vocabulary to create work in the international language.	I can use my imagination and experiment with language to create my own literature in the international language.	I can use my imagination and experiment with different creative forms and techniques to create my own literature in the international language.

I can express my opinions in my language of choice supporting my views with examples from the literature I have heard, read or viewed in the international language.	I can recognise the features of different genres responding in my language of choice to what I have heard, read, or viewed in the international language, asking and answering questions to gain an understanding.	I can explore and analyse what I have heard, read or viewed in the international language and compare it with my own culture and experiences, communicating this in my language of choice.
I can show empathy when responding to literature and understand that others may have different views from my own.	I can express my opinions in my language of choice on what I have heard, read or viewed in the international language, showing empathy and consideration of others' views.	I can express and justify my opinions in my language of choice on what I have heard, read or viewed in the international language, showing empathy and explaining others' views.

### **Designing your curriculum**

This provides specific guidance when incorporating learning in science and technology in your curriculum. It should be read together with the overarching <u>Designing your curriculum</u> section which is relevant to learning and teaching through all areas of learning and experience.

#### Cross-curricular skills and integral skills

A curriculum must embed the mandatory cross-curricular skills and the integral skills that underpin the four purposes of the curriculum. The following are some key principles which settings/schools should consider when designing learning and teaching in the Languages, Literacy and Communication Area of Learning and Experience (Area).

#### Cross-curricular skills

#### Literacy

Literacy should be at the heart of this Area, across all statements of what matters. Literacy skills should be explicitly taught in this Area. These can allow learners to express themselves, to understand and interpret written and spoken language and to articulate meaning. Settings and schools should plan for the application and development of learners' literacy skills across the curriculum at every progression step.

The descriptions of learning for this Area are broad in scope and provide reference points for progression. More detail about progression in literacy across the curriculum is provided in the National Literacy Framework.

#### Numeracy

In this Area there are often opportunities to use literacy and numeracy skills together, for example when working out worded problems. There should also be opportunities to explore numeracy in different languages which can consolidate conceptual understanding.

#### **Digital competence**

Learning in this Area should provide opportunities to use different methods of digital communication. Learners should learn how to compose clear and appropriate messages tailored for particular audiences, sharing, collaborating, editing and adapting, as required. Opportunities should also be offered for them to collaborate locally and globally through digital platforms in order to increase awareness and understanding of different languages and cultures. Using technology when learning about literature can help learners deepen their understanding beyond the text in front of them.

#### Integral skills

#### **Creativity and innovation**

Learning in this Area should provide opportunities to experiment with and use languages creatively in order to give learners the confidence to take risks, to express opinions and to generate ideas across languages that can lead to innovative outcomes. They can develop their creativity through opportunities to create and perform literature. Creative expression can enhance learners' understanding of the key concepts as well as the method of expression itself.

#### Critical thinking and problem-solving

In this Area listening, reading, speaking and writing should underpin the development of critical thinking and problem-solving. These skills can be honed by communicating with others in order to understand situations and articulate ideas and to develop responses to problems.

#### **Personal effectiveness**

Learners should develop their personal effectiveness and self-awareness when learning and using their languages, which will in turn support learning across the whole curriculum. Providing a language-rich environment should support all learners to reflect on their own strengths in language use, and identify their own areas of development in order to continuously enhance their language and communication skills.

#### Planning and organising

Learning in this Area should enable learners to develop the skills to select and use appropriate sources and information. This should allow them to organise ideas, to create effective plans and to develop creative works. Given the opportunity to use literacy skills to present plans and implement solutions with clarity, learners can reflect on their work and plan and implement further improvements.

#### Specific considerations for this Area

The four statements of what matters in this Area refer to Welsh, English and international languages. The four statements should be considered holistically when designing the setting/school's curriculum. They are interdependent, with each one supporting the development of the other three. All methods of communication including listening, reading, speaking and writing can be developed through literature and through exploring the links between languages, culture and identity. Each statement recognises that learning skills and knowledge in one language can strengthen the knowledge and learning of those skills in all subsequent languages.

#### Key principles when designing your curriculum for this Area

Settings and schools will need to plan to ensure all learners make appropriate progress in Welsh, in English and in international languages. The concept of a language learning continuum underlies progression in this Area. Learners will progress from having little or no language skills and knowledge towards proficiency in the languages they learn at school. Learners will have varying proficiencies in their languages and when designing the setting/school's curriculum for second and subsequent languages the early steps, such as grapheme-phoneme correspondence, will need careful consideration.

Descriptions of learning for 'Languages connect us' are common to all learners in all schools in Wales.

Descriptions of learning for the other three statements of what matters in this Area are presented to reflect the pace and depth in different language learning contexts. Settings/schools will need to consider the descriptions of learning for Welsh most suited to their learners. As well as learners in Welsh-medium settings and schools, the pace and depth of progression in Welsh shown in the Welsh/English descriptions of learning may also be the most suitable for some learners in English-medium schools who, for example, have attended a cylch meithrin or have transferred from a Welsh-medium school to an English-medium school.

Progression in international language(s) is shown in descriptions of learning for Progression steps 3, 4 and 5. In addition to Welsh and English, all learners should have the opportunity to learn at least one international language at school and to use other home languages and community languages they may speak. Settings and schools should encourage learners to use their plurilingual skills and learners should recognise the value of being able to use different languages.

The choice of which international languages to offer lies with the school or cluster. Schools may choose to offer different international languages – language learning skills are transferable, and learners can enhance their linguistic and intercultural awareness by being exposed to multiple languages. Settings and schools may wish to collaborate with others, for example to offer continuity in the language offered from one progression step to the next or so that learners have more choice of international languages. They may choose to offer languages which are spoken by staff at the school or by the wider community. They should take advantage of opportunities globally, digitally and in the community to reinforce the learning and teaching of languages.

The Five Stage Model for English/Welsh as an additional language (EAL/WAL) and support materials should be referenced when considering progression of EAL learners in English-medium schools and WAL learners in Welsh-medium schools. The Language acquisition needs assessment survey toolkit for primary and secondary teachers is available online on Hwb.

Language acquisition needs assessment survey toolkit: English as an additional language (EAL) - Primary Language acquisition needs assessment survey toolkit: English as an additional language (EAL) - Secondary

#### Key considerations when designing your curriculum for this Area

When designing your curriculum in your school, consideration should be given to the nature of your language provision as well as the range of linguistic and cultural experiences you offer your learners. Schools should also plan for skills development in all the languages on offer and ensure breadth and depth when selecting literature.

#### Considerations for provision and experiences

- What is the current linguistic landscape of your school and your cluster? How can you best use this to help your learners make progress in all their languages?
- How will you choose which international language(s) to teach? How will you provide breadth and depth in international languages?
- How will you provide suitable and sufficient opportunities for learners to use their Welsh, English and international language(s) in purposeful contexts?
- How will you create an environment which encourages learners to draw upon their knowledge of a number of languages, including knowledge of language varieties (accent, dialect, register, jargon, and idiolect) to facilitate understanding and improve communication when interacting with others?
- How will you develop strategies to include and build upon learners' home languages and cultures in the classroom?
- How will you provide opportunities for learners to participate in spontaneous as well as planned speaking in various contexts with a range of peers and adults?
- How will you provide learners with a wide range of literature, including multimodal and challenging texts in paper, digital, electronic and live form, fostering their enjoyment of purposeful reading and viewing, and encouraging them to explore books and new technologies?

#### **Considerations for language development**

- How will you ensure that all learners continue to progress in all their languages from their different starting points?
- How will you provide opportunities to connect with others in different parts of the world to offer authentic contexts for language and cultural development?
- How will you ensure rich language environments for all learners, including multilingual environments, face-to-face, via digital or written language(s), as a model for improving their own language skills?

- How will you provide a systematic development of phonological awareness and phonemic awareness?
- How will you support reading development for all learners?
- What relevant, engaging, authentic and challenging stimuli can you provide to inspire and aid preparation for purposeful speaking and writing (indoors, outdoors, through visits/trips, etc.)?
- How will you provide opportunities for learners to make progress both in learning to talk and learning through talk?
- How will you ensure that knowledge and skills in one language are transferred to and developed in other languages?

#### Considerations when selecting literature

- Learners should experience a wealth of literature which provides opportunities to realise the four purposes of the curriculum.
- Schools should create a positive reading culture which immerses learners in literature that reflects their interests and ignites their enthusiasm.
- Learners should be exposed to a diverse range of literary experiences beyond the classroom.
- Learners should be introduced to literature which reflects diversity and cultures in the locality, Wales as well as the wider world.
- Schools should choose literature which is sufficiently rich and substantial to engage learners intellectually and emotionally and which can encourage them to be inspired, moved and changed.
- Schools should ensure that learners experience a range of contemporary literature and literature from different periods in the past.

Learners should have the opportunity to experience and to learn about literature and creators of literature which have made a significant contribution, be that in Wales (in Welsh/English), other nations in the United Kingdom, and/or the wider world (including English literature and literature in learners' international and home languages). This contribution might be in terms of a field of literature, in terms of the language, or in terms of culture and heritage.

#### Pedagogical considerations for this Area

When designing your curriculum, consideration should be given to pedagogies specific to this Area. Effective learning and teaching of skills such as listening, speaking, reading and writing require a systematic whole-school approach, as do cross-linguistic skills such as mediation and translanguaging. Schools should also be aware of the differences between acquisition and learning first, second and subsequent languages in their contexts and consider how best to ensure progression for all learners in all their languages, for example through immersion, Content and Language Integrated Learning (CLIL) or plurilingual activities.

Further information can be found at:

Bilingual teaching methods Rapid Evidence Assessment: Effective Second Language Teaching Approaches and Methods

#### Reading

At the earliest stages, learning to read is dependent upon the spoken language that learners have. Developing good listening and speaking skills is therefore vital to success in learning to read.

Young learners may be familiar with storybooks, nursery rhymes and print when they start funded education. Some will have started to recognise single letters and words. Others, however, will have much more limited experience of using language, sharing stories, songs and rhymes with adults. In some cases, learners may have general or specific learning needs. They may also be learning to read in a language that is different from their spoken language. These different starting points and experiences mean settings and schools need to make informed decisions about how they will help learners to become successful readers.

Learners should gain early reading skills within a rich language environment, where activities are meaningful, imaginative and varied. These activities should promote learners' interest in reading for enjoyment, for imaginative purposes and for learning.

Research recognises phonological and phonemic awareness as important cognitive skills in learning to read. Schools should put in place a clear procedure for, and place emphasis on, the systematic development of learners' phonological and phonemic awareness. When appropriate for a learner, the teaching of phonics should be systematic and consistent, and take place with other language activities, which promote vocabulary-building and comprehension.

Being able to decode words alone is not enough; readers need to be able to make sense of what they read. Teaching should enable learners to gain a range of skills and to apply different strategies in order to become fluent readers. This should provide them with a secure basis for developing and extending their language and literacy skills.

#### **Illustrating breadth**

The following are provided as examples of how you could explore different topical learning in this Area. These are illustrations only.

Increased knowledge of languages can unlock the stories and histories of place names such as Cymru (and Wales) itself, or Glasgow in Scotland or Trelew in Argentina. A range of literature from writers and poets as diverse as T.H. Parry Williams, Shakespeare, Manon Steffan Ros, Eric Ngalle Charles and Russell T. Davies offers different perspectives and interpretations of Wales and Welsh experiences which could inspire learners to express their own identity and understand changes over time in society. Being able to communicate effectively using both Welsh and English and at least one other international language supports learners to be active and successful citizens of Wales and the world.

#### Key links with other Areas

Developing effective communication and literacy skills as well as learning about etymology within this Area should facilitate progression in all areas of learning and experience by giving learners better access to information, concepts and terminology.

#### Expressive Arts

Expressive Arts disciplines can be used as a vehicle for learners to develop languages, literacy and communication including through visual literacy, creative thinking and creative writing, understanding audience and purpose and adapting language for audience, performance poetry, drama, film, multimedia, role play and song. Experiences of literature in all its forms across these two Areas enable the learner to develop cultural empathy and sensitivity.

#### **Health and Well-Being**

These two Areas link together to provide learners with the skills to effectively communicate which in turn provide a foundation for developing healthy relationships. Physical and cognitive development will impact on the acquisition of speech and language and the development of fine motor movements, such as handwriting. Literacy skills allow learners to explore texts related to health and well-being. Reading and writing for pleasure also provides opportunities to improve the learner's sense of well-being.

#### Humanities

Languages and literature play a vital role in identity and can help to shape and influence the development of communities and societies. Literature provides valuable evidence for, and can be a focus of, enquiries in humanities. Learners can explore literature from a range of cultures and societies, in the past and present, from their locality, Wales and the world.

#### **Mathematics and Numeracy**

Songs and rhymes can be used to teach early numeracy in all languages. Finding and applying patterns for problem-solving is a skill required for progress in these two Areas.

#### Science and Technology

Digital communication and computer languages offer opportunities for links to reinforce learning across these two Areas. Learners apply literacy skills such as instructional and observational language in Science and Technology, as well as accessing and producing texts and accurately using technical and scientific vocabulary. Design communication skills bring these two Areas together both in developing learners' design thinking as well as communicating their ideas to others.

#### **Cross-cutting themes**

#### Local, national and international contexts in this Area

Learning in this Area should inspire and enable learners to:

- become multilingual, able to use Welsh, English and at least one international language, and develop an openness to and curiosity about all languages and cultures of the world
- enjoy learning languages and develop a positive perception of themselves as users of those languages
- competently utilise the language(s) and culture(s) of their homes and communities and use these as a foundation for subsequent language learning
- have a firm foundation in Welsh and English to build on when learning other languages and when broadening their understanding of national and global contexts
- reflect on their personal and local linguistic heritage
- become knowledgeable about the diversity of local, national and international linguistic and cultural heritage
- develop their own sense of linguistic identity within their locality, Wales and the wider world. Whether learners and their families have been born in Wales or not, the learners being educated in a school in Wales will over time develop a relationship with Wales and their own sense of Welsh identity as well as with the wider world
- immerse themselves in local, national and international cultures and languages through visits, engaging with people locally and globally and connecting digitally
- foster an understanding of the culture and identity of those around them, to develop mutual respect and social cohesion
- develop an appreciation of literature, inspired by writers and creators of Wales and the wider world.

#### Careers and work-related experiences in this Area

When designing a curriculum, settings and schools should incorporate opportunities for learners to have experiences that enable them to:

- develop knowledge of enhanced career opportunities available through languages
- understand that being bilingual or multilingual can open doors in the world of work
- understand the increasing demand for Welsh in the workplace as Wales works towards the target of a million Welsh speakers by 2050
- value their Welsh language skills and to develop these skills further
- understand that skills in international languages are essential for Wales to thrive as an international trading nation
- develop effective communication skills in all their languages and develop confidence to interact with others and build relationships in all places of work
- develop language associated with work when learning all languages
- explore how their language skills can benefit them as they prepare for agile and flexible working in Wales and beyond.

#### Human rights education and diversity in this Area

Practitioners should use the opportunities within this Area to foster and develop learners' respect and empathy for others' languages and identities, while celebrating and respecting similarities and differences. Multilingualism within the classroom should be seen as an opportunity to raise learners' awareness of diversity and promote the cultural wealth of the school and community.

Schools should seek involvement with the home and other settings and to promote partnerships. Supporting the development of **home languages** can help to promote and develop trust, appreciation and respect across languages and cultures.

## Mathematics and Numeracy Area of Learning and Experience

#### Introduction

The development of mathematics has always gone hand in hand with the development of civilisation itself. A truly international discipline, it surrounds us and underpins so many aspects of our daily lives, such as architecture, art, music, money and engineering. And while it is creative and beautiful, both in its own right and in its applications, it is also essential for progress in other areas of learning and experience.

What is more, numeracy – the application of mathematics to solve problems in real-world contexts – plays a critical part in our everyday lives, and in the economic health of the nation. It is imperative, therefore, that mathematics and numeracy experiences are as engaging, exciting and accessible as possible for learners, and that these experiences are geared towards ensuring that learners develop mathematical resilience.

In the early years, play forms an important part in the development of mathematics and numeracy, enabling learners to solve problems, explore ideas, establish connections and collaborate with others. In later years, learners need to have opportunities to work both independently and collaboratively to build on the foundations established in the early years.

Progression in the Mathematics and Numeracy Area of Learning and Experience (Area) involves the development of five connected and interdependent proficiencies which have no hierarchy. These are crucial considerations for schools when designing their curriculum to ensure the progression of learners.

- Conceptual understanding
- Communication using symbols
- Fluency
- Logical reasoning
- Strategic competence

What matters in this Area has been expressed in four statements which support and complement one another and should not be viewed in isolation. Together they contribute to realising the four purposes of the curriculum.

Formal mathematics has developed through rigorous logical reasoning. It involves inventing or discovering abstract objects and establishing the relationships between them. It also teaches the difference between conjecture, likelihood and proof.

Mathematical thinking involves applying similarly logical reasoning, this time to the investigation of relations within and between concepts, along with justifying and proving findings. Indeed, understanding mathematical concepts and being able to apply and reason with the abstract representations of concepts is central to learning mathematics. And essential to this is comprehension of, and proficiency with, the symbols and symbol systems used in mathematics.

Applying mathematics requires strategic competence in the use of abstraction and modelling, and learners develop resilience, as well as a sense of achievement and enjoyment, as they overcome the challenges involved. Subsequently, mathematical activities teach learners not to be afraid of unfamiliar or complex problems, as they can be reduced to a succession of simpler problems and, eventually, to basic computations. As they reflect on the approaches used, and on their own mathematics and numeracy learning, learners can develop metacognitive skills which can help them identify steps to take to improve performance. Through this they can become **ambitious, capable learners, ready to learn throughout their lives**.

Experiences in this Area also contribute to developing **enterprising**, **creative contributors**, **ready to play a full part in life and work**. These can encourage learners to be creative because it asks them to play, experiment, take risks and be flexible in tackling mathematical problems.

Because mathematics is essentially abstract, it allows learners to operate with objects that do not physically exist, and to use and develop their creativity to imagine and discover new realities. It also supports numerical modelling and forecasting which can in turn encourage entrepreneurial thinking.

Mathematics and numeracy can also help learners become **ethical**, **informed citizens of Wales and the world** by providing them with tools to analyse data critically, enabling them to develop informed views on social, political, economic and environmental issues. It encourages clarity of thinking, allowing learners to understand and make reasoned decisions.

In this Area, learners can encounter contexts involving health and personal finance, where they may develop the skills needed to manage their own finances, make informed decisions and become critical consumers. Experiences in this Area will help them learn to interpret information and data to assess risk, and to use their numeracy skills across the curriculum to make effective choices, all of which can help them become **healthy, confident individuals, ready to lead fulfilling lives as valued members of society**.

#### **Statements of what matters**

## The number system is used to represent and compare relationships between numbers and quantities.

Numbers are the symbol system for describing and comparing quantities. This will be the first abstract concept that learners meet in mathematics, and it helps to establish the principles of logical reasoning. In mathematics the number system provides learners with a basis for algebraic, statistical, probabilistic and geometrical reasoning, as well as for financial calculation and decision-making.

Knowledge of, and competence in, number and quantities are fundamental to learners' confident participation in the world, and provide a foundation for further study and for employment. Computational fluency is essential for problem-solving and progressing in all areas of learning and experience. Fluency is developed through using the four basic arithmetic operations and acquiring an understanding of the relationship between them. This leads to preparing the way for using algebraic symbolisation successfully.

#### Algebra uses symbol systems to express the structure of mathematical relationships.

Algebra is the study of structures abstracted from computations and relations, and provides a way to make generalisations. Algebraic thinking moves away from context to structure and relationships. This powerful approach provides learners with the means to abstract important features and to detect and express mathematical structures of situations in order to solve problems. Algebra is a unifying thread running through the fabric of mathematics.

Algebraic thinking is essential for reasoning, modelling and solving problems in mathematics and in a wide range of real-world contexts, including technology and finance. Making connections between arithmetic and algebra develops skills for abstract reasoning from an early age.

## Geometry focuses on relationships involving shape, space and position, and measurement focuses on quantifying phenomena in the physical world.

Geometry involves playing with, manipulating, comparing, naming and classifying shapes and structures. The study of geometry encourages the development and use of conjecture, deductive reasoning and proof. Measurement allows the magnitude of spatial and abstract features to be quantified, using a variety of standard and non-standard units. It can also support the development of numerical reasoning.

Reasoning about the sizes and properties of shapes and their surrounding spaces helps learners to make sense of the physical world and the world of mathematical shapes. Geometry and measurement have applications in many fields, including art, construction, science and technology, engineering, and astronomy.

## Statistics represent data, probability models chance, and both support informed inferences and decisions.

Statistics is the practice of collecting, manipulating and analysing data, allowing representation and generalisation of information. Probability is the mathematical study of chance, enabling predictions of the likelihood of events occurring. Statistics and probability rely on the application and manipulation of number and algebra.

Managing data and representing information effectively provide learners with the means to test hypotheses, draw conclusions and make predictions. The process of reasoning with statistics and probability, and evaluating their reliability, develops critical thinking and analytical skills that are fundamental to enabling learners to make ethical and informed decisions.

### **Principles of progression**

In the Mathematics and Numeracy Area of Learning and Experience (Area), the model of progression is based on the development of five interdependent proficiencies, outlined below. This model of progression can be considered as both longitudinal and cross-sectional. To ensure progress in any mathematics learning, proficiencies should be developed and connected in time and should also develop over time.

Each proficiency may relate to multiple principles, and these are set out below.

#### **Proficiencies**

The following interdependent proficiencies have been used in developing the descriptions of learning and are central to progression at each stage of mathematics learning. Numeracy involves applying and connecting these proficiencies in a range of real-life contexts, across the curriculum.

#### **Conceptual understanding**

Mathematical concepts and ideas should be built on, deepened and connected as learners experience increasingly complex mathematical ideas. Learners demonstrate conceptual understanding through being able to explain and express concepts, find examples (or non-examples) and by being able to represent a concept in different ways, flowing between different representations including verbal, concrete, visual, digital and abstract.

An increasing breadth of knowledge is achieved through the learners being introduced to new mathematical concepts, and depth of knowledge is achieved through learners being able to represent, connect and apply a concept in different ways and in different situations. The concepts that learners are introduced to will become increasingly complex, and understanding the way in which concepts connect will contribute to a growing understanding of the ideas within this Area. An understanding of how mathematical concepts underpin learning help learners make connections and transfer learning into new contexts.

#### **Communication using symbols**

Learners should understand that the symbols they are using are abstract representations and should develop greater flexibility with the application and manipulation of an increasing range of symbols, understanding the conventions of the symbols they are using.

The introduction and application of a new concept will involve developing an understanding of how symbols or expressions are abstract representations that succinctly describe a range of situations, thus contributing to a growing understanding of the nature of mathematics. The introduction of new symbols will add to the breadth of knowledge and the communication with symbols will contribute to refinement and growing sophistication in the use and application of skills.

#### Fluency

As learners experience, understand and effectively apply increasingly complex concepts and relationships, fluency in remembering facts, relationships and techniques should grow, meaning that facts, relationships and techniques learned previously should become firmly established, memorable and usable.

Development of fluency and accuracy reflects the refinement and a growing sophistication in the use and application of skills.

#### Logical reasoning

As learners experience increasingly complex concepts, they should also develop an understanding of the relationships between and within these concepts. They should apply logical reasoning about these relationships and be able to justify and prove them. Justifications and proof should become increasingly abstract, moving from verbal explanations, visual or concrete representations to abstract representations involving symbols and conventions.

Refinement and growing sophistication in the use and application of skills will be demonstrated through the application of increasingly sophisticated logical reasoning. The development of an understanding of relationships between mathematical concepts and the development of justifications and proofs, leads to a growing understanding of the nature of mathematics and helps learners make connections and transfer learning into new contexts. The development of justifications and proof help support the increasing effectiveness of learners.

#### Strategic competence

Learners should become increasingly independent in recognising and applying the underlying mathematical structures and ideas within a problem, in order to develop strategies to be able to solve them.

Recognising mathematical structure within a problem and formulating problems mathematically in order to be able to solve them relies on an understanding of the ideas and disciplines within areas of learning and experience alongside a depth of knowledge. It also supports making connections and transferring learning into new contexts and developing increasing effectiveness as a learner. The recognition of the power of mathematics in enabling the representation of situations should lead to a growing appreciation of the usefulness of mathematics.

## **Descriptions of learning**

### The number system is used to represent and compare relationships between numbers and quantities.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I have experienced and explored numbers, including cardinal, ordinal and nominal numbers, in number-rich indoor and outdoor environments. I can notice, recognise and write numbers in a range of media, through a multisensory approach, from 0 to 10 and beyond. I can use mathematical language to describe quantities, and to make estimates and comparisons such as 'more than', 'less than' and 'equal to'.	<ul> <li>I can read, write and interpret larger numbers, up to at least 1000, using digits and words.</li> <li>I can understand that the value of a number can be determined by the position of the digits.</li> <li>I have engaged in practical tasks to estimate and round numbers to the nearest 10 and 100.</li> <li>I am beginning to estimate and check the accuracy of my answers, using inverse operations when appropriate.</li> </ul>	I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately.	I can use standard index form to represent large and small numbers, performing calculations in context. I can use appropriate rounding methods, including significant figures, to estimate values.	I can use my knowledge that measurements are not always accurate, and are subject to tolerance and margins of error, to solve problems involving upper and lower bounds.

I have experienced the counting sequence of numbers in different ways, reciting forwards and backwards, and starting at different points. I can use my experience of the counting sequence of numbers and of one- to-one correspondence to count sets reliably. I can count objects that I can touch, and ones that I cannot.	I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions.			
	I am beginning to understand that unit fractions represent equal parts of a whole and are a way of describing quantities and relationships. I have experienced fractions in practical situations, using a variety of representations.	I can demonstrate my understanding that non- integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations.	I can use my knowledge of the equivalence of fractions, decimals and percentages to understand that numbers or proportions may be represented in different ways. I have derived and can apply the rules of indices, using integer exponents.	I can recognise the difference between rational and irrational numbers, and I have derived rules and applied them to simplify and decompose surds. I can extend my knowledge of the equivalence of fractions, decimals and percentages to understand that recurring decimals may be represented in different ways.

	I have explored equivalent fractions and understand equivalent fraction relationships.	I can demonstrate my understanding that a fraction can be used as an operator or to represent division. I can understand the inverse relation between the denominator of a fraction and its value.		I have explored the relationship between powers, roots and fractional indices and can use it to solve problems.
I have explored forming a quantity in different ways, using combinations of objects or quantities. I can communicate how sets change when objects are added to and taken away from them. I have experienced grouping and sharing with objects and quantities, and I can group or share small quantities into equal-sized groups.	I have explored additive relationships, using a range of representations. I can add and subtract whole numbers, using a variety of written and mental methods. I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'.	I can verify calculations and statements about number by inverse reasoning and approximation methods. I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. I have extended my understanding of multiplicative reasoning to include the concept and application of ratio, proportion and scale.	I can fluently and accurately apply the four arithmetic operations in the correct order with integers, decimals and fractions, consolidating my understanding of reciprocals when dividing fractions.	I have used proportional reasoning to compare two quantities, using direct or inverse proportion, and I can solve problems involving repeated and inverse proportional reasoning.

	I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays.	I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. I have experienced and explored simple multiplicative relationships that allow me to discuss the properties of number, including factors, multiples, prime and square numbers.		
I have used money, and the language of money, in play and real-life situations and I can understand that I need to exchange money for items.	I can understand the equivalence and value of coins and notes to make appropriate transactions in role play.	I can demonstrate an understanding of income and expenditure, and I can apply calculations to explore profit and loss.	I can apply percentages and ratio to solve problems including simple and compound interest, appreciation and depreciation, calculating budgets, foreign currencies, and basic taxation on goods and services. I have developed my understanding of finance in personal, local and global contexts.	I have further developed my understanding of finance to include annual equivalent rate (AER) and annual percentage rate (APR) so that I can evaluate and compare financial products. I can calculate income tax and understand the implications of taxation including using the Welsh rates of income tax and other taxes devolved to Wales.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I am beginning to recognise, copy, extend and generalise patterns and sequences around me.	I have explored patterns of numbers and shape. I can recognise, copy and generate sequences of numbers and visual patterns.	I can explore and create patterns of numbers and shapes. I can explain numerical sequences and spatial patterns in words and by generalising them.	I can explore, generate, identify and represent both numerical and spatial linear sequences, including finding and using a general term.	I can explore, generate, identify and represent both numerical and spatial patterns, using linear and non-linear sequences.
I am beginning to demonstrate, using objects, an understanding of the concepts of 'equal' and 'not equal'.	I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use inequality signs when comparing quantities to indicate 'more than' and 'less than'. I have explored commutativity with addition and multiplication and I can recognise when two different numerical expressions describe the same situation but are written in different ways.	I can use commutativity, distributivity and associativity to explore equality and inequality of expressions.	I can demonstrate my understanding of the concept of a variable, using algebraic notation to form linear expressions, equations and inequalities. I can interpret algebraic expressions because I understand the way symbols are used to represent operations, multiples and powers.	I can explore the concepts of equality and identity, connecting geometric, algebraic and graphical representations.

## Algebra uses symbol systems to express the structure of mathematical relationships.

		I can manipulate algebraic expressions fluently by simplifying, expanding, substituting and factorising by extracting a common factor.	I can manipulate algebraic expressions fluently by expanding double brackets, factorising quadratic expressions and simplifying algebraic fractions.
I can find missing numbers when number bonds and multiplication facts are not complete.	I can demonstrate an understanding of the idea of input, application of a rule (including inverse operations) and output, using a function machine or other appropriate methods, and I have applied this idea to solve problems. I can model problems, using expressions and equations involving symbols or words to represent unknown values, adopting the conventions of algebra. I can use inverse operations to find unknown values in simple equations.	I can explore and use efficient methods of solving equations and inequalities in the first degree, and I can apply this knowledge to rearrange formulae where the subject appears in one term. I can use equations and inequalities in the first degree to represent and model real-life situations and solve problems, using a range of representations.	I can explore and use efficient methods of solving simultaneous, quadratic and trigonometric equations, and I can apply this knowledge to rearrange formulae where the subject appears in more than one term. I can use equations and inequalities, and relevant graphs, to represent and model real-life situations and solve problems, including those which describe proportion and exponentiation.

	I can explore linear equations graphically and I can demonstrate an understanding of the effect on the line when the constant or coefficient of <i>x</i> is changed.	I can investigate a variety of non-linear graphs, including quadratic, cubic and reciprocal, to develop an understanding of the effect of the coefficients and constants on the shape of the graph.
		I can determine or approximate the rate of change at a point on a graph and I can investigate the area under a graph, understanding what these represent in real-life contexts.

# Geometry focuses on relationships involving shape, space and position, and measurement focuses on quantifying phenomena in the physical world.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can understand and apply the language of time in relation to my daily life. I have used a variety of objects to measure. I am beginning to understand the need to repeat the same physical unit without any gaps when measuring. I can make estimates and comparisons with measures, such as 'shorter than', 'heavier than'.	I am beginning to tell the time using a variety of devices. I have explored and used different ways of showing the passing of time, including calendars, timelines, simple timetables and schedules. I have explored measuring, using counting, measuring equipment and calculating, and I can choose the most appropriate method to measure. I can estimate and measure, using non- standard units, before progressing onto standard units. I can use a variety of measuring devices from different starting points.	I can read analogue and digital clocks accurately and I can make interpretations and perform calculations involving time. I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. I can convert between standard units, including applying my understanding of place value to convert between metric units.	I can represent and use compound measures, using standard units, and I can demonstrate an understanding of the relationship between a formula representing a measurement and the units used.	

compared, and used the general language of shapes through investigative play. I have symm conte discu	ensional and three- ensional shapes and properties in a range ontexts. ve explored reflective metry in a range of exts and I can uss it as a property of bes and images. I can cha a th I can dim two I can dim can cha a th	derstanding of the operties of two- nensional shapes to clude the number of les and symmetry. an explore vertices, ges and faces of three- nensional shapes and I n use these aracteristics to describe hree-dimensional shape. an relate a three- nensional shape to its o-dimensional nets. an use efficient methods finding the perimeter d area of two- nensional shapes, derstanding how basic mulae are derived.	circumference of a circle to its diameter. I can apply my understanding of area to be able to calculate the surface area of simple prisms. I can derive and apply the formulae for the volume of simple prisms. I can apply my understanding of area to demonstrate and use the relationship between	I can apply my understanding of the effect of transformations on the properties of shapes in order to explain why they are similar, congruent or neither. I can explore and demonstrate an understanding of the effect of scale when comparing measurements of similar shapes in all three dimensions. I can use my knowledge of scale and ratio to calculate the lengths and areas of fractions of shapes, including arcs and segments of circles. I can use my knowledge of measurement to calculate the perimeter, area (or surface area) and volume of compound two-dimensional and three-dimensional shapes.
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				I can explore trigonometric ratios in right-angled triangles and I can use my knowledge of them to solve problems involving lengths, angles and area of any triangle.
I have explored movements and directions and I am beginning to use mathematical language to describe position.	I can describe and quantify the position of objects in relation to other objects.	I have developed an understanding of the ways in which co-ordinates are used to solve problems involving position, length and shape.		I can locate and describe the locus of points defined by a range of different criteria.
	I have explored the concept of rotation and I am beginning to use simple fractions of a complete rotation to describe turns.	I can demonstrate my understanding of angle as a measure of rotation and I can recognise, name and describe types of angles.	I can use angle and shape facts to deduce further features and relationships of triangles and quadrilaterals. I can explore and calculate angles formed by parallel lines and by a transversal. I have applied my understanding of angles to model and solve problems involving bearings.	I can use logical arguments and my knowledge of polygons, intersecting lines, angle and the circle theorems to deduce and calculate the size of angles and length of lines.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can investigate, collect and record data found in my environment.	I can collect and organise data to ask and answer questions in relevant situations.	I can collect different types of data to answer a variety of questions that have been posed, demonstrating an understanding of the importance of collecting relevant data.	I can choose a sensible hypothesis to investigate. I have explored the relationship between the type of data I have collected (including qualitative and quantitative) and how this can be manipulated and represented.	I can explore different sampling methods, including systematic and stratified sampling, understanding the need to select appropriate sampling methods when collecting data.
I can group sets into categories and I am beginning to communicate the rule(s) I have used.	I can sort and classify using more than one criterion, including the use of Venn diagrams and Carroll diagrams. I am beginning to record and represent data in a variety of ways, including the use of tally charts, frequency tables and block graphs, when appropriate axes and scales are provided.	I can represent information by creating a variety of appropriate charts of increasing complexity, including tally charts, frequency tables, bar graphs and line graphs.	I can make informed choices about how to organise and represent data, using a wide range of graphs and charts, including pie charts, frequency diagrams and frequency polygons.	I can extend my methods for representing data, including cumulative frequency, box and whisker, and histograms, to interpret measures of central tendency and measures of spread.

## Statistics represent data, probability models chance, and both support informed inferences and decisions.

I am beginning to represent and interpret data, using a range of methods.	I am beginning to interpret and analyse simple graphs, charts and data. I can explain my findings and I am beginning to evaluate how well my method worked.	I can use different scales to extract and interpret information from a range of diagrams, tables and graphs, including pie charts with simple fractions and proportions. I can recognise any trends that are seen. I can find and use the mean of a simple set of data to explain how the statistics do, or do not, support an argument. I can recognise how anomalies affect the mean.	I can understand that different averages can be used to compare data, including grouped data, recognising the advantages and disadvantages of each average. I can explore trends and anomalies in data sets, investigating correlation between two variables. I can use data to draw conclusions about hypotheses and I have communicated my findings clearly. I can critique my own methods and findings.	I can critically analyse statistics, considering how data is represented, its reliability, and whether and how the data has been manipulated to tell a particular story. I can make informed decisions based on statistical evidence, identifying bias and anomalies.
		I can explore outcomes and chance, using appropriate language, and I am beginning to use numerical values to represent probability.	I can systematically explore all the possible mutually exclusive outcomes of successive and combined events.	I can use modelling to solve problems involving probabilities of mutually exclusive, independent and dependent events.

		I have explored the relationship between relative frequency and theoretical probability, and I can make judgements on the outcomes of experimental data.
		I can use probabilistic arguments, drawing on theory, information, research and experimentation, to make informed decisions.

## **Designing your curriculum**

This provides specific guidance to be used when incorporating learning in mathematics and numeracy in your curriculum. It should be read together with the overarching <u>Designing your</u> <u>curriculum</u> section which is relevant to learning and teaching across all areas of learning and experience.

#### **Cross-curricular skills and integral skills**

A curriculum must embed the mandatory cross-curricular skills and the integral skills which underpin the four purposes of the curriculum. Below are some key principles which settings and schools should consider when designing learning and teaching in the Mathematics and Numeracy Area of Learning and Experience (Area).

#### **Cross-curricular skills**

#### Literacy

Practitioners should develop engaging and accessible experiences where learners are given regular opportunities to describe, explain and justify their understanding of various mathematical concepts, using appropriate mathematical vocabulary. Literacy skills can also be developed in order to describe mathematical processes, such as reasoning, understanding a range of calculation strategies, describing visualisation of shapes, studying and interpreting information in statistics and comparing alternative methods before arriving at a solution to a mathematical problem. These literacy skills can be used as they encounter practical, real-life problems.

#### Numeracy

This Area, by definition, has numeracy at its heart. The five mathematical proficiencies – Conceptual understanding, Communication using symbols, Fluency, Logical reasoning and Strategic competence – can be applied and connected by using a range of real-life contexts to introduce and explore mathematical concepts, as well as to consolidate them. For example, percentages can be applied to annual percentage rates (APRs) to demonstrate their use in financial literacy.

#### **Digital competence**

Digital approaches enhance learners' mathematical and numeracy skills across a range of situations that will naturally occur within the area of learning and experience. This is more than simply the interaction with technology. For instance, the development of learners' digital skills could be done by collaborating to solve a problem and developing algorithms to support the understanding of patterns. Another instance would be creating a graph by using a spreadsheet to enhance digital understanding and also strengthen learners' mathematical and numeracy skills. As learners develop and progress, they will increasingly use more complex digital skills, processes, techniques and systems to create solutions to address specific problems, opportunities or needs. Aspects of collection, representation and analysis, for example, will become more sophisticated as learners progress.

#### Integral skills

#### **Creativity and innovation**

Mathematical working requires and develops creativity and curiosity which also transfer to other aspects of life. Frequently in mathematical problem-solving the learner does not immediately know how to approach the problem; it takes creativity and courage to explore different approaches before deciding how to proceed. Planning and modelling tasks within mathematics develops learners' ability to turn ideas into action.

#### Critical thinking and problem-solving

The development of logical and critical thinking underpins learning in mathematics. Mathematics teaches us problem-solving skills which transfer to all areas of the curriculum, to life in general and to the world of work. Mathematics involves solving problems and begins by analysing the requirements, before then asking questions and evaluating information. In the development of solutions, learners identify potential approaches and develop arguments, justifying their decisions.

#### **Personal effectiveness**

Studying mathematics develops personal effectiveness. When studying mathematics everyone encounters challenges at some point, and overcoming these challenges requires and develops resourcefulness and resilience. Communicating about mathematical thinking and solving problems is a core aspect of mathematics. Mathematical communication is precise and logical and will be useful in life generally.

#### Planning and organising

Mathematical thinking requires learners to be organised and, as they progress through school, their organisational skills will develop, particularly as they plan and implement the sequential data-handling cycle. In their mathematical problem-solving, learners should be encouraged to predict and estimate solutions and then to check their answers, reflect on their results and evaluate their approaches. Increasing confidence in decision-making for mathematical problem-solving supports learners to be more aspirational in setting goals and challenges for themselves including planning how to achieve these.

#### Specific considerations for this Area

The different areas of mathematics are highly interconnected and dependent on one another and concepts are built up over time, drawing on prior knowledge and learning, often from more than one area of mathematics. What is important when planning to teach any specific topic is to be aware of the prior knowledge the learners need in order to access and understand the new topic.

Algebra, geometry and statistics cannot be understood without a prior understanding of number and consistent reference to numbers, calculations and the number system. As learners progress, they learn to see numerical expressions as relational rather than computational, e.g. a computation such as 2 + 8 = 10, and that this is the basis for deriving other facts, e.g. 8 + 2 = 10, 8 = 10 - 2, and so on. This lays the foundations for using algebraic symbolisation successfully.

Making connections between arithmetic and algebra helps to develop tools and skills for abstract reasoning from an early age. Measure is an aspect of geometrical thinking which is closely connected to number, and much of the development of understanding of number can emerge through increasingly sophisticated measuring. Geometric thinking involves proportional reasoning, which connects with development in number work; it also involves transforming shapes, which relates to the use of functions and mapping in algebra. Probability is expressed through number in various ways, using percentages, fractions and decimals, and an understanding of the different representations; the connections between them are necessary for effective expression of probability. Statistics involves manipulation, representation and interpretation of data, which in turn require numerical and geometric thinking.

The aspiration is to deliver this Area so that there is a shift in culture towards learners fostering a positive and resilient attitude towards it.

#### Considerations for curriculum development

- Learners should be given opportunities to explore mathematically rich environments both indoors and outdoors. The environment will be developmentally appropriate and facilitate first-hand experiences with mathematical concepts and a range of resources.
- The structure and sequence of mathematics and numeracy topics should be informed by the hierarchical and connected nature of mathematical concepts, in order to ensure foundations are built upon and experiences are connected.
- Learners need to become increasingly fluent in their use of number, through a broad range of experiences, in order to describe, interpret and communicate size, scale and comparisons, both within and beyond mathematics. They should also become increasingly fluent in their calculations, both with and without the use of calculators.
- By introducing a reasoning and problem-solving approach to all mathematics and numeracy experiences, the development of the four purposes and positive dispositions will be supported.
- By using real-life examples to introduce, explore and consolidate mathematical concepts, learners of all ages make connections between the concrete, the pictorial and the abstract. Through a broad range of experiences, learners appreciate the power of mathematics to express relationships concisely, in forms that are universally understood.

- Learners should engage in meaningful and substantial tasks such as: modelling reallife numerical problems, financial calculations such as creating and evaluating budgets for events and analysing risks, developing mathematical sequences through patterns in nature and using the sequential data-handling cycle to pose and investigate their own research questions.
- Practitioners should consider the appropriate use of a range of digital technologies, manipulatives, everyday objects, and concrete and abstract representations of mathematical objects to help learners to engage with mathematical concepts from more than one perspective.
- It is important that learners are able to interpret answers and check that they make sense in context, including by estimation, and are able to use appropriate methods to answer questions by collecting, analysing and summarising data and interpreting results. They are able to evaluate their methods and suggest different or better ways to approach investigations in the future.
- Deep understanding in mathematics and numeracy should develop through planning for all five of the mathematical proficiencies, and the connection and application of these in a range of contexts.
- The proficiencies are interconnected and interdependent; they cannot be seen as hierarchical and they can be developed alongside each other. Learners will develop their mathematical proficiencies at different times and may be developing several at the same time. For example, as a child becomes more fluent in adding two-digit numbers, they will be developing their conceptual understanding of place value.
- It is not expected that all five proficiencies will be developed in a single session, but all five need to be developed during a particular mathematical concept. There are certain processes and applications, for example the sequential data-handling cycle, which should be introduced from the outset, as they are essential to conceptual understanding.

# Using the proficiencies, a contextual example: Learning about fractions – the case of $\frac{1}{2}$

## Conceptual understanding

Understanding that a half is a result of dividing something into two equal parts. This could be through connecting concrete and/or real-life experiences of partitioning objects and numbers into equal parts with images (e.g. pictures and images on the number line) and the abstract representation of a ½ using the symbolic notation. A learner who understands what a half is might be able to give real-life or visual examples, and would also be able to explain why something might not be a half (e.g. a pizza cut into two parts which are not equal).

#### Communicating using symbols

Understanding the convention of how a half is written and what the symbols mean. This could also involve linking division and fractions (i.e.  $\frac{1}{2} = 1 \div 2$ ) and using terms such as numerator and denominator.

#### Strategic competence

Being able to recognise real-life situations which involve a half and being able to represent these mathematically; being able to model situations involving halving mathematically; using pictures/images and language and symbols to illustrate a half.

## Fluency

Being able to count in steps of a half and being able to begin to recall halves of numbers.

#### Logical reasoning

Being able to understand the relationship between a half and a whole; being able to justify why 2/4 is also a half. Being able to reason that  $\frac{1}{2} + \frac{1}{2} = 1$ ,  $\frac{1}{2} \times 2 = 1$  and  $1 \div 2 = \frac{1}{2}$ . Being able to justify why there may be many ways of splitting a shape in half.

Through connecting these proficiencies within a learner's experience of ½, learners should develop a deep understanding of a half as an example of a fraction. The way in which these foci are introduced could vary, but ultimately, having opportunities to explore and connect these proficiencies should ensure learner progression within this concept.

## Considerations for pedagogy

- There is no research that says one way of teaching mathematics is better than any other. Nevertheless pedagogy should ensure the overall development of these proficiencies and also be relevant for the mathematics being taught.
- Mathematics teaching needs to be conceptually connected and coherent. This requires mastery and memory of earlier concepts; comprehensible starting points; consistent use of language, symbols, images and other representations; illuminating choice of examples; relevant use of digital tools. These should be combined into lesson sequences which might include problem-solving, exploration, direct instruction, application, exercises and extended tasks as appropriate for the specific mathematics being taught and the overall development of the five proficiencies. At any point in a sequence the mathematical focus might be a new concept, an extension of an earlier concept, a relationship, a technique, a fact, a theorem, a mathematical strategy or a way of thinking.
- Guiding questions and information about choice and sequencing of pedagogical approaches to manage this diversity will be included in the resource on pedagogy.

## Illustrating breadth

The following are provided as examples of how you could explore different topical learning in this Area. These are illustrations only.

Numeracy and knowledge of real-world contexts could include understanding exchange rates, mortgage calculations and taxation, including the developing system of Welsh taxes. Through algebraic thinking and knowledge, learners could develop capabilities that can be applied to topics including personal finance and energy production in Wales and elsewhere.

Geometry could draw examples from, and help develop a knowledge of, urban development as it differs across Wales, medical technology and computer imaging. From a strong foundation of problem solving, logical reasoning and understanding data, Mathematics and Numeracy is critical for informed citizens who are ready to play a full part in life and work.

#### Key links with other Areas

When designing your curriculum, you should consider how learning links across Areas in order to achieve a holistic approach to learning. Mathematics and numeracy can be used across all other Areas to enhance, stimulate and support learning. Equally, mathematics and numeracy can be developed through other Areas. Some of the key links to learning in this Area are detailed below.

#### **Expressive Arts**

The use of numeracy and concepts from this Area are embedded in the Expressive Arts Area of Learning and Experience supporting all disciplines. Consideration should be given to counting, sequencing and time and the exploration of how space, patterns, symmetry, shape and position can be used across the arts. Ratios, scale, proportions and fractions can also be explored in the Expressive Arts, for example in music. The use of songs and rhymes can assist with the embedding of numeracy during the early progression steps.

#### Health and Well-being

One of the most important links is with the Health and Well-being Area of Learning and Experience and an example would be around financial literacy and risk. Financial literacy is provided for in the statement of what matters dealing with the number system. This is complemented in health and well-being where learning could explore financial literacy through risk and personal debt, and its consequences. Because of such close links, it is strongly recommended that both elements are taught in parallel.

The Health and Well-being Area of Learning and Experience also provides learners with the knowledge and understanding of the process of decision-making, including the implications of decisions and consideration of risk. Numeracy provides an important context in which to explore and support positive decision-making, particularly in respect of financial decisions.

Furthermore, the Health and Well-being Area of Learning and Experience provides opportunity to explore the role of numeracy in purchasing and preparing food to support nutrition and its role in measuring distance, weight and time.

#### Humanities

The Humanities Area of Learning and Experience provides authentic contexts for the application of mathematics and numeracy skills. Enquiries in the humanities will use a range of qualitative and quantitative data. Humanities enquiries will often include the collection of primary data using sampling methods, and the representation and analysis of data and statistics in a range of forms. Learners are provided with opportunities to sort and classify data, and identify patterns, trends and anomalies. Supporting entrepreneurship, ratio and scale; finance; rounding; ordering will also be relevant.

#### Languages, Literacy and Communication

Songs and rhymes can be used to teach early numeracy in all languages. Finding and applying patterns for problem solving is a skill required for progress in these two Areas. **Science and Technology** 

From the use of data and statistics in inquiry and evidence, geometry and measurement in design and development, through to data handling in technology learning in science and technology is often underpinned by progression in mathematical understanding, as expressed through the five mathematical proficiencies. Curriculum links between these two Areas are, therefore, multiple and often quite detailed. Schools may wish to consider curriculum sequencing in particular when designing and planning their curriculum to ensure opportunities in science and technology to contextualise mathematical conceptual learning are fully optimised.

#### **Cross-cutting themes**

#### Local, national and international contexts in this Area

Mathematics is a universal language. To make sense of this language and to understand mathematical concepts, learners need examples rooted in everyday life. This is especially important for young learners who are often unable to think abstractly. Learning within local, national and international contexts will enable learners to understand the connection between mathematics and numeracy and authentic real-life contexts that span both Wales and the world.

Wales has a proud history of producing outstanding mathematicians and schools should consider every opportunity to highlight their achievements, inspiring learners to become mathematicians themselves.

Using international examples from a range of cultures enables learners to understand the history of mathematics and its development into an international and universally applicable language. This also promotes and supports cross-curricular learning.

Practitioners should explore local sources and resources, using a school's unique environment to enhance learning in mathematics and numeracy. Using Welsh examples when teaching financial matters, such as the Welsh rates of income tax as set by the Welsh Government and agreed by The Senedd, highlights the link between mathematics and numeracy and the real world.

**Welsh language:** consider teaching learners the traditional, vigesimal, way of counting in Welsh, as well as the modern decimal way, to highlight the distinctive nature of mathematics in a Welsh language context.

#### Careers and work-related experiences in this Area

An engaging and exciting Mathematics and Numeracy curriculum inspires learners and equips them with the foundations to become life-long learners, embarking upon rich and varied career opportunities.

Studying mathematics and numeracy helps develop skills in logical thinking, problemsolving and decision-making, which are qualities valued by employers across many job sectors.

Teachers should make learners aware of the wide range of careers available through employer engagement such as employer talks, visits to workplaces, events or practical activities to show how mathematics and numeracy is essential in the world of work, whether in employment or as an entrepreneur. Incorporating careers and work-related experiences within Mathematics and Numeracy enables greater engagement, raises aspirations, and informs effective decision-making. It allows learners to understand and evaluate the world of work.

Through authentic contexts, learners should be given opportunities to experience mathematics within the world of work. Schools should give purpose to mathematical learning through the creation of school and locally based enterprise projects which develop, foster and evaluate entrepreneurial skills.

# Science and Technology Area of Learning and Experience

## Introduction

The importance of science and technology in our modern world cannot be overstated. Developments in these areas have always been drivers of change in society, underpinning innovation and impacting on everyone's lives economically, culturally and environmentally. As such, the Science and Technology Area of Learning and Experience (Area) will be increasingly relevant in the opportunities young people encounter and the life choices that they make.

Ready access to vast amounts of data requires all learners to be able to assess inputs critically, understand the basis of information presented as fact, and make informed judgements that impact their own behaviours and values. They need to develop the ability to meaningfully ask the question, 'Just because we can, does that mean we should?'

What matters in this Area has been expressed in six statements which support and complement one another, and should not be viewed in isolation. Together they contribute to realising the <u>four purposes</u> of the curriculum.

Through robust and consistent evaluation of scientific and technological evidence, learners can become **ethical**, **informed citizens of Wales and the world**, who will be able to make informed decisions about future actions. **Healthy, confident individuals, ready to lead fulfilling lives as valued members of society** are informed by knowledge of their bodies and the ecosystems around them, and of how technological innovations can support improvements in health and lifestyle.

Ambitious, capable learners, ready to learn throughout their lives should engage with scientific and technological change. The knowledge and deep understanding gained through experiencing what matters in science and technology can help learners live independent and fulfilling lives that sees them contributing to society and culture in a variety of ways. Learners who are enterprising, creative contributors, ready to play a full part in life and work embrace such challenges, as they are encouraged to take risks, to innovate and evaluate, and learn to develop solutions. Thus, they can become more resilient and purposeful learners across all areas of learning and experience.

This Area draws on the disciplines of biology, chemistry, computer science, design and technology, and physics to enhance learners' knowledge and understanding of the world.

## **Statements of What Matters**

# Being curious and searching for answers is essential to understanding and predicting phenomena.

Curiosity about science and technology leads us to ask questions about the world around us. By being encouraged to use logic, evidence and creativity, learners will be supported to inquire into and apply scientific knowledge to further understanding of how our world works. Developing and testing models will also help them make sense of its complexity. With evidence derived from observations, new theories can be developed, and existing ideas may be refined or challenged.

Learners need to be able to evaluate scientific claims to help make informed decisions that affect our environment and well-being. The choices we make depend on many factors, including moral viewpoints and personal beliefs. However, rigorous and robust evidence-based research provides a solid foundation on which to base decisions. As ethically informed citizens, learners will need to consider the impact of our actions and of scientific and technological developments, locally and elsewhere in Wales, as well as in the wider world, asking 'Just because we can, does that mean we should?'

# Design thinking and engineering offer technical and creative ways to meet society's needs and wants.

By applying their experiences, skills and knowledge, learners can design and shape innovative engineered solutions. Being part of a user-centred design process will encourage them to use creativity to develop ideas, manage and mitigate risks, and minimise complexities. When engineering products, services and systems, they will need to understand and control the interactions between materials, structures, components and users. The application of engineering processes allows learners to develop accuracy, precision, dexterity and craftsmanship. By designing and engineering outcomes in response to needs and wants, learners can become enterprising problem solvers.

#### The world around us is full of living things which depend on each other for survival.

By recognising the diversity of living things and how they interact with their environment, learners can develop an understanding of how these have evolved over significant periods of time. All living things require specific conditions and resources to survive and they may have to compete with other organisms to do so. Humans form part of the living world and our decisions and actions, along with natural selection, can have a significant impact on the diversity of life. Knowing about the structures and functions of living things enables learners to understand how these things grow, develop and reproduce successfully. Developing an understanding of the factors which affect the health and success of organisms allows us to make informed decisions, including about the prevention and treatments of diseases.

#### Matter and the way it behaves defines our universe and shapes our lives.

The universe and all living things are made up of matter. The behaviour of matter determines the properties of materials and allows us to use natural resources, as well as to create new substances. Understanding the nature of matter can help learners to appreciate the impact that chemistry has on the world around them, as well as how it contributes to advances in science and technology. Chemical reactions happen continuously in our environment as well as in living things. Learning how to control and apply these reactions has benefits to individuals and industry.

#### Forces and energy provide a foundation for understanding our universe.

Forces and energy can be used to describe the behaviour of everything from the smallest building blocks of matter to the motion of planets and stars. Understanding forces and energy helps us to predict and control the behaviour of our environment. These ideas can be modelled and expressed formally, providing a consistent mathematical framework to describe physical systems. This has enabled some of society's greatest scientific breakthroughs and engineering achievements. An understanding of forces and energy can help learners overcome future challenges and use our planet's resources efficiently and sustainably, helping them become responsible citizens of Wales and the world.

#### Computation is the foundation for our digital world.

Computation involves algorithms processing data to solve a wide range of real-world problems. Computational processes have changed the way we live, work, study and interact with each other and our environment. They provide the foundation for all software and hardware systems, but learners should also be aware of the limitations of what computers can achieve. To create and use digital technologies to their full potential, learners need to know how they work. They also need to understand that there are broad legal, social and ethical consequences to the use of technology. This can help learners to make informed decisions about the future development and application of technology.

## **Principles of progression**

#### Increasing breadth and depth of knowledge

Progression in the Science and Technology Area of Learning and Experience (Area) is demonstrated by learners exploring and experiencing increasingly complex ideas and concepts that sit within the statements of what matters. Knowledge moves through exploration from a personal understanding of the world to an abstract view that enables learners to conceptualise and justify their understandings. Progression of learning is not linear but cyclical with learners revisiting existing knowledge, linking this with their new learning, and adjusting schema in light of new discovery.

# Deepening understanding of the ideas and disciplines within areas of learning and experience

Progression in this Area includes the development of a deep understanding of the learning expressed within all the statements of what matters within the Area and the complex relationships and connections which exist between them. Investigative skills which are developed within the context of one statement of what matters can be applied in others. Iterative approaches to problem-solving from computer science and design and technology can also be beneficial to all sciences. Early stage learning will be typified by a holistic approach to asking questions and exploring the world around the learner, with increasing specialisation at later stages.

#### Refinement and growing sophistication in the use and application of skills

Investigation, exploration, analysis, problem-solving, and design are key skills required as learners work along the continuum of learning in this Area. As a learner makes progress, there is increasing sophistication in the way in which they explore and investigate problems and the resulting formulation of creative solutions. There is a refinement and increasing accuracy in what learners are able to do and produce both in the physical and digital environments.

#### Making connections and transferring learning into new contexts

As learners progress across the continuum they will increasingly be able to make links between current learning and other experiences and knowledge developed within and beyond this Area. This will include making links with knowledge and experiences from outside the school environment. Problems within science and technology involve ethical or moral dilemmas and it is an increased understanding in the way in which these dilemmas are or even should be approached which will signify progression. Learners will develop the capacity to apply their learning in science and technology to inform their thinking and action beyond the classroom.

#### Increasing effectiveness as a learner

Problem-solving and design tend to be iterative; the development of skills-related resilience and self-efficacy become important to enable learning through a 'trial and improve' approach. Over time there is an increased independence in learning, including interdependence in peer group learning. Learners should develop an awareness of their increasing sophistication of understanding and an ability to regulate their own thinking.

## **Descriptions of learning**

Exploration of the world around us at progression steps 1 and 2 provides the foundation for learning across statements of what matters in science and technology. Some descriptions of learning at these foundational progression steps are, therefore, duplicated across some statements of what matters, where directly relevant, to better support planning for learning progression.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can show curiosity and question how things work. I can explore the environment, make observations and communicate my ideas.	I can ask questions and use my experience to suggest simple methods of inquiry. I can recognise patterns from my observations and investigations and can communicate my findings. I can use my knowledge and understanding to	I can identify questions that can be investigated scientifically and suggest suitable methods of inquiry. I can suggest conclusions as a result of carrying out my inquiries. I can evaluate methods to suggest improvements.	I can research, devise and use suitable methods of inquiry to investigate my scientific questions. I can use my findings to draw valid conclusions. I can evaluate and identify ways of improving the reliability of data, taking anomalies into account.	I can devise, justify and use systematic methods of inquiry to rigorously investigate my scientific questions and recognise limitations. I can link experimental findings and theoretical knowledge to draw valid conclusions. I can critically evaluate the quality of data and justify improvements.
	predict effects as part of my scientific exploration.		I can use a range of models to explain and make predictions.	I can apply and make links between a range of models and use them to support or challenge theories.

#### Being curious and searching for answers is essential to understanding and predicting phenomena.

what I d I use, ca impact c	cognise that o, and the things an have an on my ment and on		e	can evaluate the effectiveness of models and refine them to better fit the evidence available.
living thi I can ex relations living thi habitats cycles. I can ob describe material	ings. I can enga scientific a	ind scien cal evidence a rang ny own sourc claim scien I can opinio	tific knowledge from ge of evidence ces to evaluate s presented as tific facts. review my own ons based on new tific evidence.	can research and evaluate claims presented as scientific facts by considering the validity of the supporting evidence. can evaluate alternative theories, where the evidence available does not conclusively support one outcome, to form a considered opinion.
I can investigate different forms of energy and how it can be transferred. I can explore and communicate the basic properties of light, sound, electricity and magnetism. I can identify things in the environment which may be harmful and can act to reduce the risks to myself and others.	red. plore and hicate the basic es of light, electricity and sm. entify things in ronment which harmful and can educe the risks to my actions actions of on the env living thing present, in life. my actions actions of on the env living thing present, in life.	s and the impact others impact rironment and js. ribe the I can science and impact y, past and techn	ct of our actions c ibute to the changes a e environment and k versity. describe the c cts of science and c nology, past and t ent, on society.	can evaluate contemporary issues that affect the planet and biodiversity. can evaluate the effectiveness and impact of scientific and technological solutions on a personal, societal and environmental level.

## Design thinking and engineering offer technical and creative ways to meet society's needs and wants.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can design while I make and communicate about what I am making. I can safely use simple tools, materials and equipment to construct and deconstruct. I can explore the properties of materials	I can produce designs to communicate my ideas in response to particular contexts. I can make design decisions, using my knowledge of materials and existing products, and suggest design improvements. I can explore how different component	I can draw inspiration to design from historical, cultural and other sources. I can creatively respond to the needs and wants of the user, based on the context and on the information collected.	I can investigate and draw inspiration from historical, cultural and other sources to design creative solutions. I can recognise and act on user needs and wants in increasingly challenging contexts.	I can investigate, analyse and draw inspiration from historical, cultural and other sources to design new proposals that add value. I can tackle challenging problems, independently and collaboratively, to address wider design requirements in increasingly unfamiliar contexts.
and choose different materials for a particular use. I can identify, follow and begin to create sequences and patterns in everyday activities.	parts work together. I can safely use a range of tools, materials and equipment to construct for a variety of reasons. I have experienced using basic prototyping techniques to improve outcomes.	I can identify and consider factors when developing design proposals. I can use design thinking to test and refine my design decisions without fear of failure.	I can identify and prioritise factors which inform my design proposals. I can develop my design thinking to test and refine my design decisions by responding to success and failure.	I can prioritise and justify multiple design factors to improve the effectiveness of my design decisions. I can fluently use design thinking, including my successes and failures, to test and refine my design decisions.

I can identify things in the environment which may be harmful and can act to reduce the risks to myself and others.	I can apply my knowledge and skills when making design decisions in order to produce specific outcomes.	I can develop my knowledge and skills to support and refine my design decisions in order to produce purposeful outcomes.	I can identify when I need to seek out new knowledge and skills to support and refine my design decisions in order to produce purposeful outcomes.
I can explore and describe the properties of materials and justify their uses.	I can consider how my design proposals will solve problems and how this may affect the environment.	I can adopt an iterative process to improve my design proposals, while minimising their negative impact on the environment and society.	I can use an iterative process naturally which considers both potential intended and unintended consequences of my designs, in order to adapt and justify proposals.
	I can use design communication methods to develop and present ideas, and respond to feedback.	I can use a variety of design communication methods and techniques to develop and present ideas clearly, and can respond constructively to feedback.	I can independently select and apply appropriate communication methods to develop and present my ideas fluently. I can engage with feedback from different audiences and respond constructively to it.

I can combine component parts, materials and processes to achieve functionality and improve the effectiveness of my outcomes.	I can investigate, evaluate, select and combine component parts, materials or processes to improve the functionality and effectiveness of my outcomes.	I can independently select, justify and combine component parts, materials and processes to improve functionality and can evaluate their impact on the effectiveness of my outcomes.
I can select and safely use appropriate tools, materials and equipment to construct purposeful outcomes.	I can select and safely use specialist tools and techniques in order to develop and construct my outcomes.	I can independently select specialist equipment and use it with precision in order to perform complex tasks safely and effectively.
I can use prototyping as a link between my designing and making. I can take into account the impact my making may have on the environment.	I can use prototyping techniques to test ideas and support my making. I can use my making skills and knowledge of materials to produce high-quality and purposeful outcomes.	I can independently select and apply low-fidelity and high-fidelity prototyping to test ideas, materials and structures. I can use my making skills and knowledge of materials to produce high- quality and effective outcomes.

	I can evaluate and apply responsible habits of working which consider environmental and societal impacts.	I can apply and justify responsible habits of working which take into account impacts on the environment and society.

## The world around us is full of living things which depend on each other for survival.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can recognise that plants and animals are living things which grow. I can identify, follow and begin to create	I can recognise patterns from my observations and investigations and can communicate my findings.	I can describe how living things compete for specific resources and depend on each other for survival.	I can describe the interdependence of organisms in ecosystems and explain how this affects their chances of survival.	I can explain how variation of organisms within a changing environment leads to natural selection which drives evolution.
sequences and patterns in everyday activities.	I can use my knowledge and understanding to predict effects as part of my scientific exploration.	I can describe the features of organisms and recognise how they allow them to live, grow and reproduce for survival in their environment.	I can explain how reproduction, mutations and the environment can lead to variation and adaptations within organisms which can affect their chances of survival.	

I can recognise that what I do, and the things I use, can have an impact on my environment and on living things. I can explore relationships between living things, their habitats and their life	I can explain the role of different organs and systems that enable plants and animals to live and grow. I can describe some changes in growth and development caused by hormones.	I can describe the levels of cellular organisation and how cells perform biological processes that ensure the development and survival of organisms.	I can explain how biological processes and control mechanisms enable organisms to function, develop, reproduce and survive.
cycles.	I can identify the threats to the development and health of organisms and recognise some natural defences, preventions and treatments.	I can explain the threats to the development and health of organisms and describe how the effects of these are reduced by natural defences, preventions and treatments.	I can evaluate the factors which affect the development and health of organisms. I can explain how prevention and treatment can support natural defence systems and enhance the health of organisms.

## Matter and the way it behaves defines our universe and shapes our lives.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can explore the properties of materials and choose different materials for a particular use.	I can recognise patterns from my observations and investigations and can communicate my findings.	I can recognise that changes in materials affect their properties and uses under different conditions.	I can describe and explain the properties of different types of matter and relate these to how they are used.	I can use my knowledge of the atomic nature of matter to explain the structure and properties of materials and apply this to their uses.
sequences and patterns in everyday activities.	predict effects as part of my scientific exploration. I can make design decisions, using my knowledge of materials and existing products, and suggest design improvements. I can explore and describe the properties of materials and justify their uses.		I can describe different types of chemical reactions, explain their uses and identify any effects of the products formed. I can use my knowledge of chemical reactions to explain what happens when conditions are changed.	I can explain how and why different types of chemical reactions occur and can describe them in atomic or molecular terms, as well as in quantitative terms. I can understand how the products and effects of reactions can be managed and controlled.

I can observe and describe ways in which materials change when they are mixed together.	I can recognise that our planet provides natural materials and can explain why they may have been processed to make them useful.	I can use different methods to analyse materials in order to understand their composition. I can describe how various materials need different techniques in order to separate and refine them.	I can use my knowledge and understanding of matter to explain how different techniques can be used to extract, refine and analyse materials for a variety of uses.
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## Forces and energy provide a foundation for understanding our universe.

Progression step 1	Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can identify, follow and begin to create sequences and patterns in everyday activities.	I can recognise patterns from my observations and investigations and can communicate my findings. I can use my knowledge and understanding to predict effects as part of my scientific exploration.	I can explore how the motion of objects can be affected by applying specific forces. I can use a variety of simple models to describe the forces acting on an object.	I can explain and calculate how multiple forces acting on an object will affect its motion.	I can quantitively analyse the movement of objects and understand how applying forces to them can change their motion.

I can investigate different forms of energy and how it can be transferred. I can communicate the effect forces have on myself and on objects. I can explore and communicate the basic properties of light, sound, electricity and magnetism.	I can explain that energy can be transferred from one place to another and how this can be used to provide the energy we need in our modern lives.	I can understand conservation of energy and can explain that energy is used at differing rates, and that this affects the power and efficiency of a system. I can apply my knowledge of energy and forces to new designs and can improve the efficiency of systems.	I can quantify the energy in systems and apply this to system design in order to improve efficiency.
	I can describe the factors that affect electrical circuits and this will enable me to change variables and predict what will happen.	I can explain the factors that affect current and describe the way in which it behaves in various circuits. I can design and create circuits that will perform a desired function.	I can explain and quantitatively model the behaviour of circuits. I can independently design and build multiple-component circuits to solve problems.

I can explain how the	I can predict the	I can explain how and
properties of sound and	behaviour of waves in	why various categories
light will affect how they	different circumstances.	of waves are used for
are experienced.	By applying simple	different applications.
By manipulating the	rules, I can use waves	I can apply
properties of sound and	in order to learn more	understanding of waves
light, I can produce a	about the world around	to ask questions and
desired effect.	me.	solve problems.
I can describe how magnetic fields behave and explore a range of practical uses for them.	Through experiment, I can explore magnetic fields to investigate factors that affect their strength. I can apply my understanding of the interaction of fields in order to explore uses of magnetism.	

## Computation is the foundation for our digital world.

Progression step 2	Progression step 3	Progression step 4	Progression step 5
I can safely use a range of tools, materials and equipment to construct for a variety of reasons.	I can use conditional statements to add control and decision-making to algorithms.	I can decompose given problems and select appropriate constructs to express solutions in a variety of environments.	I can identify, define and decompose problems, choose appropriate constructs and express solutions in a variety of
I can use computational thinking techniques, through unplugged or offline activities.	I can identify repeating patterns and use loops to make my algorithms more concise.	I can select and use data structures that efficiently manage data in algorithms	environments. I can use file-handling techniques to manipulate data in
I can create simple algorithms and am beginning to explain errors.	I can explain and debug algorithms.	I can plan and implement test strategies to identify errors in programs.	I can test, evaluate and improve a solution in software.
to determine their purpose and predict outcomes.	I can use sensors and actuators in systems that gather and process data about the systems' environment.	I can select and use multiple sensors and actuators that allow computer systems to interact with the world around them.	I can design and create physical systems that use appropriate components and logic to complete tasks and achieve goals.
	I can safely use a range of tools, materials and equipment to construct for a variety of reasons. I can use computational thinking techniques, through unplugged or offline activities. I can create simple algorithms and am beginning to explain errors. I can follow algorithms to determine their purpose and predict	I can safely use a range of tools, materials and equipment to construct for a variety of reasons.I can use conditional statements to add control and decision-making to algorithms.I can use computational thinking techniques, through unplugged or offline activities.I can identify repeating patterns and use loops to make my algorithms more concise.I can create simple algorithms and am beginning to explain errors.I can explain and debug algorithms.I can follow algorithms to determine their purpose and predict outcomes.I can use sensors and actuators in systems that gather and process data about the systems'	I can safely use a range of tools, materials and equipment to construct for a variety of reasons.I can use conditional statements to add control and decision-making to algorithms.I can decompose given problems and select appropriate constructs to express solutions in a variety of environments.I can use computational thinking techniques, through unplugged or offline activities.I can identify repeating patterns and use loops to make my algorithms more concise.I can select and use data structures that efficiently manage data in algorithms.I can follow algorithms to determine their purpose and predict outcomes.I can use sensors and actuators in systems that gather and process data about the systems' environment.I can select and use more concise.I can follow algorithms to determine their purpose and predictI can use sensors and actuators in systems that gather and process data about the systems' environment.I can select and use multiple sensors and actuators that allow computer systems to interact with the world

I am beginning to explain the importance of accurate and reliable data to ensure a desired outcome. I can follow instructions to build and control a	I can identify positive and negative design elements that affect user interactions.	I can apply design principles in order to design a range of efficient user interactions.	I can apply design principles in order to design a range of efficient user interactions, and evaluate effectiveness through user studies.
physical device.	I can explain how digital devices can be interconnected locally and globally.	I can explain how systems communicate, in order to design a network.	I can build and test communication systems with the aim of safeguarding my own systems and data.
	I can explain the importance of securing the technology I use and protecting the integrity of my data.	I can explain the techniques used to store and transfer data and understand their vulnerabilities.	
	I can explain how my data is used by services, which can help me make more informed decisions when using technology.		

	I can explain how data is stored and processed. I can effectively store and manipulate data to produce and give a visual form to useful information.	I can choose the most appropriate format for the storage and interrogation of data. I can make use of mathematical and logical operators in different software tools to investigate a line of inquiry independently.	I can apply computational techniques to interrogate data sets in order to produce useful insight.
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## **Designing your curriculum**

This provides specific guidance when incorporating learning in science and technology in your curriculum. It should be read together with the overarching <u>Designing your curriculum</u> section which is relevant to learning and teaching through all areas of learning and experience

#### Cross-curricular skills and integral skills

A curriculum must embed the mandatory cross-curricular skills and the integral skills which underpin the <u>four purposes</u> of the curriculum. The following are some key principles which settings/schools should consider when designing learning and teaching in the Science and Technology Area of Learning and Experience (Area).

#### **Cross-curricular skills**

#### Literacy

Learners' knowledge and use of scientific and technical vocabulary is essential in developing understanding of important ideas and concepts within this Area. Settings and schools can help learners to develop use of a range of specialist vocabulary, understand the origin of these terms and use them naturally from an early age.

#### Numeracy

Numeracy skills are important in deepening learners' practical understanding of scientific and technological concepts, including recognition of the mathematical foundations of the underlying disciplines. Settings and schools can help learners develop effective numeracy skills, including those to design and measure, model and communicate ideas, analyse and predict then draw conclusions.

#### **Digital competence**

This Area provides a range of opportunities to develop a diverse set of digital competencies, recognising their cross-curricular nature and application. Contributions in this Area can include capturing and interrogating data, recognising and evaluating computational processes, designing and expressing learners' thinking using digital devices and systems. Learners' use of a range of digital technologies and software applications is also implicit in a number of the descriptions of learning in this Area, which complement similar opportunities to develop these skills in other Areas. Therefore, when designing their curriculum, settings/schools should consider how and when the ability to use these should be taught, building on prior learning.

#### Integral skills

#### **Creativity and innovation**

In this Area schools can foster these skills through learners' curiosity and inquisitiveness about the physical and digital world, helping learners question or challenge established knowledge to deepen their own understanding, and providing a foundation for product development and entrepreneurial actions.

#### Critical thinking and problem-solving

This enables learners to tackle misconceptions within this Area, and deeper conceptual understanding, greater independence and self-regulation, and stronger inquiry skills. Problem-solving is a key driver in the design and engineering of innovative solutions.

#### **Personal effectiveness**

These skills can be enhanced through reflection on scientific and technological processes and developments. Learners' understanding of the world around them can help them work towards purposeful outcomes while developing resilience and perseverance, where failure is seen as a stepping stone to success.

#### Planning and organising

In scientific and technological processes these skills can allow learners to become increasingly independent when developing their ideas, implementing solutions, and monitoring and reflecting on results.

#### **Specific considerations for this Area**

The six statements of what matters for this Area do not align exactly with traditional subject areas, however aspects of the traditional science and technology subjects can be identified throughout the Area. The statement of what matters about being curious and searching for answers should be contextualised throughout the whole Area. When considering scientific inquiry, the <u>National Numeracy Framework</u> gives additional detail to support curriculum planning on these aspects of learning. In addition, the statement of what matters about design and engineering gives opportunities to apply learning expressed in the other five statements of what matters in order to find scientific and technological solutions.

#### Key principles when designing your curriculum for this Area

- Breadth of learning in science and technology is fundamentally interlinked with and complementary to developing depth of understanding. "Breadth and specialisation doesn't mean breadth is lost in the latter ... understanding a lot about trees is essential to understand forests" (Wineburg, S., 1997). Depth of knowledge enables learners to more independently transfer their learning to new contexts, thus enhancing their breadth of understanding. That is why the statements of what matters in this Area have been designed with strong interdependencies, and should not be considered separately in school curriculum design and planning.
- Developing a range of partnerships and engaging with science and technology professionals and experts, including but not limited to designers, scientists, engineers, computer scientists and craftspeople, can broaden experiences to deepen learners' understanding. Seeking opportunities to collaborate with a range of experts and science and technology stakeholders when engaging in curriculum design and planning (including local industry and third sector organisations) can therefore be helpful to schools. Drawing on subject specialist expertise across schools to help inform curriculum design and development can also be explored.
- The Area draws on the work of leading researchers in the field and the work of other organisations. When designing and planning their curriculum, schools could specifically consider work on *The Big Ideas of Science* and *The Big Ideas in Design and Technology,* together with curriculum development work of the Institute of Physics, Royal Society of Biology, Royal Society of Chemistry, the British Computer Society and the Design and Technology Education journal.
- When designing and planning the science and technology aspects of your curriculum schools should, where relevant, facilitate learning through active and practical experiences. Practical learning experiences of a specific, thematic or multi-disciplinary nature should strengthen learning and conceptual understanding, not simply engage learners in memorable and enjoyable tasks. The planned sequencing of science and technology learning and teaching should consider the development of the knowledge or skills learners' need, in advance of engaging them in more practical activities or inquiry.

• Exploration and experience of the world through inquiry including fieldwork, investigating environments indoors and outdoors in a safe and systematic way, are crucial for all learners across the 3 to 16 continuum. This can help build learners' understanding of different environmental issues and help them to learn to demonstrate care, responsibility, concern and respect for all living things and the environment in which we live.

#### Key considerations when designing your curriculum for this Area

- How can undertaking different types of inquiry, which builds scientific and technological procedural knowledge, also reinforce conceptual understanding?
- How can you develop contextualised learning about physical, mathematical and conceptual models?
- How will you approach consideration of the nature of scientific evidence, alongside the ethical implications and impact of science and technology on sustainability and the environment?
- How can you spark learner creativity and innovation, while developing the complexities of designing and making?
- How can you ensure that learners' ability to produce outcomes is developed as an integrated element of the curriculum?
- How can you support understanding of biodiversity, biological processes, health and disease, and evolution?
- How can learners' understanding of the structure and properties of materials be supported, alongside exploration of chemical reactions?
- How can developing understanding of how materials can be extracted, refined and analysed be contextualised?
- How can the teaching of electricity, forces and magnetism be integrated more widely in your school curriculum?
- How can learning about space and the universe be used to support scientific conceptual understanding?
- How can you put learning about the application of waves into context?
- How can learning about the design, development and application of technology, software and systems be explored across your school?
- How will you capitalise on the learning in this Area to plan the development of learners' digital skills using a range of technology and software?

## Key contexts and experiences for this Area

These can be considered through three aspects of knowledge; procedural, epistemic and content, which can be helpful in considering the nature of the learning in science and technology when developing a school curriculum. Developing knowledge on how to undertake science and technology activity (procedural) can be closely related to knowing about their value and place in society (epistemic) and, together, can be considered as aspects of learning 'about' science and technology. In particular, this learning can be seen in the statements of what matters relating to being curious and searching for answers, and design and engineering. While there are multiple inter-relationships, content knowledge (or learning 'of' science and technology) is expressed more directly in the other statements of what matters.

#### Procedural aspects of this Area can include:

- **different types of inquiry**, including out of classroom learning, the identification and mitigation of risks and hazards and appropriate use of a range of equipment, as well as user-centred inquiry as part of the design thinking process
- **using models** (from Progression step 3) with learners building, refining, using and evaluating a range of models (including conceptual and mathematical models), which may include learning about how they have been advanced and refined through scientific and technological discovery. A wide range of models are used in the Area including: representing interdependence, understanding nutrient cycles, abstract models of electrical currents, and computational processes
- **observing living things** in their natural habitats throughout the 3 to 16 continuum, leading to more sophisticated classification and collection of data to measure and compare biodiversity
- learning how materials can be manipulated:
  - at earlier steps through play, mixing materials and knowing that materials can change, and under certain conditions will react to form something new, as well as be combined to create new products
  - at later steps, different types of chemical reactions can be explored including: neutralisation, oxidation, exothermic and endothermic reactions, as well as displacement and reduction
- a range of **practical techniques**, which become increasingly more complex as learning progresses (including taking measurements and making observations), as well as considering how specific techniques to separate and analyse are appropriate for different purposes, and methods of extraction
- developing conceptual and procedural knowledge of a range of materials and techniques through practical experiences to inform learners' design thinking and support their capacity for engineering and making
- **iterative design** processes, including continual testing and evaluating. Failure and critical feedback are important experiences and learning to respond to these helps build resilience. Using low-fidelity and high-fidelity prototyping and high-quality making also supports the iterative design process
- developing fine motor movements and gross motor movements leading to accuracy, precision and craftsmanship through a range of learning activities which increase in variety as learners progress
- exploring the **uses of waves** as a means of making observations and conducting tests. Experimenting with the simple refraction of light in early progression steps, for example, can build to understanding how microscopes and magnifying glasses function

- **using 'unplugged' activities throughout the 3 to 16 continuum** to help visualise computational concepts. Hands-on, practical activities with a range of tools and devices is especially relevant for teaching principles of programming and developing deeper conceptual understanding of key syntax and constructs before implementation and application
- experiences bridging the physical and digital worlds, through use of sensors, actuators and devices that interact with and manipulate their environment, monitoring and collecting data. When designing digital artefacts learning can be explored that focuses on human-computer interaction and user-centred design (as expressed in the design and engineering statement of what matters).

#### Epistemic aspects of this Area include:

- **evaluating evidence**, with learners sourcing and engaging with a range of evidence of varying validity, reliability and credibility. This includes current and past investigations, technological developments and, as learners progress, the role of data in evidence and how empirical evidence shapes ideas in science
- the impact of science and technology on society and the evaluation of evidence of this, including in the context of the climate emergency. Learners should have opportunities to debate the benefits and risks of technological and scientific development, building their understanding of the impact of human activity on different environments, and developing and evaluating strategies (including circular design) to minimise the negative impacts of human activity
- **investigating models** from Progression step 3. Learners should learn about different models and how they can be used to solve problems, observe trends, explain and predict behaviours
- how components can be combined and integrated to produce outcomes and improve functionality, including systems thinking
- **designing technology**, with deep understanding of the needs and wants of users, using empathy and investigation. Contexts can include entrepreneurial, speculative and imagining future possibilities, and should consider social, cultural, economic and environmental factors. By pursuing effective and informed design solutions, learners can acquire and apply an ever-growing body of knowledge about the world they are designing for
- **opportunities to create and innovate** through wide-ranging and unexpected sources of inspiration to find solutions. From Progression step 4 concepts such as circular design, planned obsolescence and disruptive technologies can be explored
- how knowledge of **how different materials can be applied** supports their selection for the design and manufacture of useful products

• how using a range of **digital technologies**, **tools and systems** across the curriculum builds understanding of how technologies can impact learners' lives and future careers.

#### Content aspects of this Area can include:

- the classification of **living things** and the conditions they need to survive, alongside factors which affect biological processes and the health of organisms. As learners progress processes should include respiration, photosynthesis, digestion, cell division and reproduction. This also supports learners understanding of evolution
- **understanding their own health**: how behaviours can impact learners' physical health (including nutrition, substance use and activity) as well as sexual reproduction, human development and the role of hormones
- the **nature of materials** and the different ways that substances can be classified. As learners progress this can build deep knowledge of particle theory including the composition of particles and how they interact:
  - building from exploratory learning through play, learning about physical properties of materials and states (such as solids, liquids and gases) can lead in later learning to developing knowledge about molecular structures
  - over time, understanding the properties of metals and non-metals, how properties are affected by their structures (e.g. conductivity, melting point and malleability), the nature of organic and inorganic substances, and different types of radiation
- how understanding **trends in reactivity** can be supported by learning through the periodic table in later progression steps:
  - knowledge of the relationships between elements; recognising trends and patterns and making predictions about different types of bonding
  - how rates of reactions are affected by factors (such as temperature, concentration and surface area) leading to other factors (such as using a catalyst or changing pressure)
  - undertaking calculations on the physical properties involved in reactions; masses, concentrations, volumes and energy using word and symbol equations and interpretation of chemical formulae
- **natural materials** (e.g. oil and ores) and their processing, as well as different chemical tests. Understanding of the use of the reactivity series in metal extraction, and that the majority of materials must be processed before they can be used is, for example, helpful in learning about the impact of science and technology on the environment
- knowledge of the **working properties of materials** (including finishes), as well as making, manufacturing and construction techniques (including those that learners will not be able to experience in school, but will need to have an understanding of)

- **magnetic fields** and the nature of permanent magnets, with connections that enable broader learning about motors and generators. The combination of magnetic fields and forces enables electricity to be generated and used to create motion, which builds towards an understanding of Fleming's Laws in later progression steps
- the **conversion of energy** to various useful or wasted forms through electricity generation or use. This can lead to an appreciation of the Law of Energy Conservation
- **electricity** produced by generators can lead to either direct current or alternating current. In the case of alternating current, an understanding of waves is required. For these reasons, schools can consider electricity, forces, motion, energy and magnets holistically in the design of their curriculum
- the role of different types of waves can enable learners to understand how we deduce the structure of the Earth, provide evidence for theories of the evolution and structure of the Universe, from digital communications in computation and contexts of diagnostic exploration using waves and data collection. Knowledge about waves can also support learners' contextual understanding of sound, acoustics and soundscapes
- **space** provides a rich source of engagement for learners, including a context for considering **energy transfer**, as well as waves and the electromagnetic spectrum to enable observations and evidence gathering. Building on knowledge of the solar system, learners can consider the motion of celestial bodies caused by the forces they experience and exert on other objects, to build an understanding of Newton's Laws of Motion
- **creating software solutions** that are fit for purpose. Knowing how to design, create, test and use software that is functional, robust and considerate of diverse audiences provides learners with the fundamental knowledge, skills and experience of how modern technologies work and can be applied
- **physical computing** focuses on the interactions between humans and our environment, using technologies that can enable us to extend, enhance and automate. Physical computing is a creative framework for better understanding human relationships to the digital world
- **communication systems**. Obtaining a deeper understanding of how the technologies that connect our world operate, their features and benefits and the potential for misuse can enable us to live more safely and responsibly in our interconnected world
- **storing and processing data**. Through data literacy and data management, learners can better understand how data drives our computational world. They can use a range of software tools to create, manage and interrogate datasets to investigate lines of inquiry. Using mathematical and logical operators also supports learning expressed in the Mathematics and Numeracy Area of Learning and Experience.

#### **Illustrating breadth**

The following are provided as examples of how you could explore different topical learning in this Area. These are illustrations only.

Encouraging learners to evaluate scientific and technological developments in relation to the climate emergency can lead to understanding the relationships between science, personal agency, government action and economic factors here in Wales and at an international level. Evaluation of scientific and technological evidence, as well as the history of science and technology, could lead learners to discover the contributions of figures such as Frances Elizabeth Hoggan, Dorothy Hodgkin, Alan Turing and Alfred Russel Wallace. In developing coding skills, learners can also understand and evaluate how computational process have changed, and continue to change, the way we live, work and study. This can include the legal and ethical considerations around social networking, misinformation and big data.

#### Key links with other Areas

School curriculum design and planning should include consideration of authentic links between this Area and other areas of learning and experience, for example:

#### **Expressive Arts**

These Areas have close links, both relying on similar methods which include a process of discovery and divergent thinking and the generation of ideas which can lead to creative output and innovation. Design thinking and design processes in science and technology complement the approach to design and investigation in the expressive arts, and also involve the exploration of different media through which design and creativity can be communicated to others. In both Areas creative approaches are applied to explore concepts and materials, as well as the development of learners' manual dexterity, accuracy, precision and craftsmanship supporting production. Knowledge of the nature and development of materials is important for their selection in design and production and even understanding the science of waves can support an appreciation of and development in music.

#### Health and Well-being

These Areas are inherently linked. Knowledge and understanding of biology, physical development, biological and sexual relationships and the link between physical and emotional health are fundamental to learning in the Health and Well-being Area of Learning and Experience. Learning how the brain works can help learners understand their thoughts, feelings and emotions. How lifestyle choices can impact the human body (including diet, drug use and exercise) can be considered, as well as the science behind hormones, sexual reproduction and human development in support of relationships and sexuality education (RSE). Technology is important to the health and well-being of learners, including supporting the preparation of healthy diets. Understanding how digital media works and how to use the online world safely and responsibly, exploring relationships in an online context and understanding social norms and influences in respect of technology all support stronger decision-making in relation to online safety, online bullying and promoting positive online behaviours.

#### **Humanities**

Both of these Areas have similar and yet distinct methods and principles of inquiry. However, field work for example where learners observe living things in their natural habitats leading to the collection of data to measure and compare biodiversity, supports learning in both Areas. Knowledge of current and past scientific investigations and technological developments and their impacts on society, can also support learners in their ability to source and filter evidence. Scientific and technological developments have significant impact on human societies, and on our relationship with the natural world. Science and technology can offer solutions and responses to the challenges that humanity faces in the modern world. Other aspects of science and technology are intrinsically linked to humanities in terms of connections with, for example, physical geography and knowledge of natural materials and their processing, and these should be explored. The digital economy is a powerful influence in shaping modern societies, economies and people's lives.

#### Languages, Literacy and Communication

Digital communication and computer languages offer opportunities for links to reinforce learning across these two Areas. Learners apply literacy skills such as instructional and observational languages in this Area, as well as accessing and producing texts and accurately using technical and scientific vocabulary. Design communication skills bring these two Areas together both in developing learners' design thinking as well as communicating their ideas to others.

#### **Mathematics and Numeracy**

From the use of data and statistics in inquiry and evidence, geometry and measurement in design and development, through to data handling in technology learning in science and technology is often underpinned by progression in mathematical understanding, as expressed through the five mathematical proficiencies. Curriculum links between these two Areas are, therefore, multiple and often quite detailed. Schools may wish to consider curriculum sequencing in particular when designing and planning their curriculum to ensure opportunities in science and technology to contextualise mathematical conceptual learning are fully optimised.

#### **Cross-curricular themes**

#### Careers and work-related experiences in this Area

Learning from careers and labour market information is a key area for science and technology as it is essential for learners to develop an understanding of contexts for possible employment, as well as life skills. Employers' need for science and technology-based knowledge and skills remains strong, alongside opportunities for rewarding career and life options. The skills developed through science and technology are transferable, highly valued and sought after by employers. These include problem-solving, creativity and innovation, interpreting data and information, reasoning ability and the ability to think logically.

While there isn't a 'typical' science and technology job, stereotypes persist and need to be challenged. Women, disabled people and those from minority or socially-disadvantaged groups are consistently under-represented. With the introduction of careers-related education in primary schools, these sorts of stereotypes can be addressed from an early age; an age when they are often formed. A more diverse workforce with rounded scientific and technological understanding is not just desirable in terms of equality, but essential to maximising opportunities for all learners and meeting Wales' economic needs.

Collaboration and access to individuals and employers provide learners with experiences to learn about work, employment and the skills valued in the workplace. Learners can use the knowledge and skills gained from taking part in work-related experiences to develop successful enterprise activities in support of their science and technology learning. These provide authentic learning experiences which can help them develop as creative, enterprising contributors, forming links to the world of work.

## **Supporting learner progression: Assessment guidance**

## Introduction

Learner progression along a continuum of learning from ages 3 to 16 is central to Curriculum for Wales. Assessment plays a fundamental role in enabling each individual learner to make progress at an appropriate pace, ensuring they are supported and challenged accordingly.

This guidance outlines the key principles and purpose of assessment. It provides a clear direction for schools when developing their assessment arrangements. In order to support learners' progress, this guidance also covers the key processes needed for effective learner progression, namely:

- ensuring a shared understanding of progression
- transition along the 3 to 16 continuum
- communicating and engaging with parents/carers.

The purpose of this guidance, and the wider Curriculum for Wales guidance published alongside it, is to help schools to start thinking about designing their curriculum and assessment arrangements. It also aims to assist funded non-maintained nursery settings, pupil referral units (PRUs) and persons who commission education other than at schools (EOTAS) to understand more about the Curriculum for Wales framework.

This guidance details those aspects of the assessment arrangements that we intend to be statutory for schools, as well as those aspects to which schools will need to have due regard when designing and planning their school curriculum. These should not be conflated with activities that contribute to external accountability and national monitoring. Information gathered through individual learner assessment is for use within schools only and should not be collected or published by any external body/party.

The Welsh Government is committed to creating an inclusive education system to help ensure that all young people have access to a high standard of education and reach their full potential. In support of this commitment, this guidance has been developed to take the needs of all learners into account and recognises that their identity, language, ability, background and the support they may need differs given their particular circumstances.

#### How to use this guidance

Assessment is a fundamental part of Curriculum for Wales and is integral to the learning process. Where reference is made within this guidance to either 'curriculum', 'learning and teaching' or 'planning for learning', assessment is seen as implicit.

This guidance should be read in conjunction with the rest of the Curriculum for Wales guidance for curriculum design and implementation available online at

hwb.gov.wales/curriculum-for-wales.

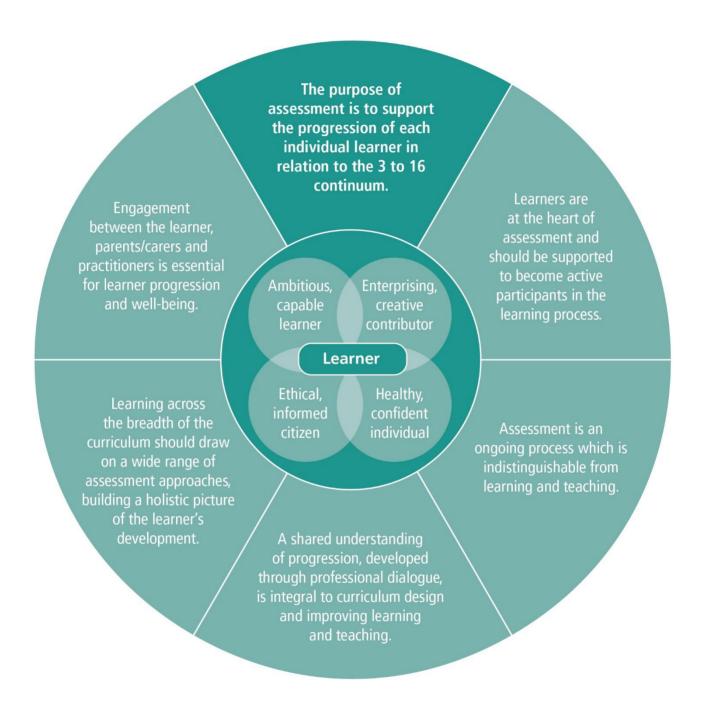
In addition to guidance on a range of core learning, the Curriculum for Wales guidance includes information on the principles of progression that span the whole curriculum, as well as for each area of learning and experience (Area). The principles of progression are supported by descriptions of learning which provide more detailed guidance on progression within each Area. These descriptions articulate what it means for a learner to progress along the continuum of learning and provide reference points for the pace of that progression.

Headteachers should use the assessment guidance as a basis for professional discussions and learning within their schools. It will also support discussions within clusters, and wider networks where appropriate, in order to build collaborative approaches for learner progression within curriculum and assessment arrangements. This guidance will also assist those working closely with schools in preparation for the introduction of Curriculum for Wales from 2022.

The responsibility for implementing the assessment guidance will be placed upon headteachers and governing bodies of all maintained schools. It will, however, be important for all practitioners to familiarise themselves with the approach outlined in this guidance so that they are able to implement it effectively from September 2022.

Providers of funded non-maintained nursery education will not be expected to design their own curriculum. Instead, Welsh Ministers will publish a curriculum, including appropriate assessment arrangements, for these providers in 2021 which can be implemented from 2022. Separate statutory guidance to support PRUs and those responsible for the provision of EOTAS will also be published in 2021. Therefore, while this assessment guidance is aimed primarily at schools, other providers may wish to familiarise themselves with it to understand the approach being taken to assessment to underpin Curriculum for Wales.

## **Our key principles**



## The purpose of assessment

Assessment is intrinsic to curriculum design and its overarching purpose within the curriculum is to support every learner to make progress. It is integral to learning and teaching and it requires effective partnerships among all those involved, including the learner.

Assessment plays a fundamental role in ensuring each individual learner is supported and challenged accordingly. It should contribute to developing a holistic picture of the learner – their strengths, the ways in which they learn, and their areas for development – in order to inform next steps in learning and teaching. Assessment should not be used to make a one-off judgement on the overall achievement of a learner at a set age or point in time against descriptors or criteria on a 'best-fit' basis.

To support individual learner progression, assessment has three main roles – supporting individual learners on an ongoing, day-to-day basis; identifying, capturing and reflecting on individual learner progress over time; and understanding group progress in order to reflect on practice. When planning and delivering learning experiences, schools and practitioners should be clear about the specific role of each assessment being undertaken, and what the understanding gained from assessment will be used for and why.

#### • Supporting individual learners on an ongoing, day-to-day basis

Assessment should focus on identifying each individual learner's strengths, achievements, areas for improvement and, if relevant, any barriers to learning. This understanding should be used by the practitioner, in discussion with the learner, to ascertain the next steps required to move learning forward, including any additional challenge and support required. This should be achieved by embedding assessment into day-to-day practice in a way that engages the learner and makes it indistinguishable from learning. This allows the practitioner to respond to the individual needs of the full range of learners within their classroom on an ongoing basis.

#### • Identifying, capturing and reflecting on individual learner progress over time

Assessment should support practitioners in identifying the progress being made by an individual learner, and recording this, where appropriate, to understand their journey over different periods of time and in a variety of ways. This includes developing an understanding of how a learner has learned, as well as what they have learned and are able to demonstrate. Reflecting on a learner's progress over time will enable practitioners to provide feedback and help plan their future learning, including any interventions, additional support or challenge which may be required. This should include both immediate next steps and longer-term objectives and goals that the learner should work towards to help keep them moving forward in their learning. It can also be used as a basis for communicating and engaging with parents/carers.

#### • Understanding group progress in order to reflect on practice

Assessment should also enable practitioners and leaders within the school to understand whether different groups of learners are making expected progress. This should be used to identify strengths and areas for improvement in both the school curriculum and daily practice, including consideration of how the needs of learners as individuals have been met. This important focus is a means for schools to ensure their curriculum, and the learning and teaching, helps raise standards as well as helping to raise the attainment of learners from disadvantaged backgrounds. It is not about external reporting, but about a school understanding what it needs to know about its learners in order for them all to maximise their potential, and identifying specific challenges and the support which particular groups might need. This understanding will also contribute to a school's process of self-evaluation and continuous improvement.

#### Awarding external qualifications

While this guidance focusses on learner progression from ages 3 to 16 at a school level and a classroom level, assessment for the purposes of awarding external qualifications is different in nature, as external qualifications have a greater level of external control and prescription. Assessment for this purpose is outside the scope of this guidance.

External qualifications will be developed to reflect Curriculum for Wales and help to realise its ambition. Qualifications Wales is currently considering the development of future qualifications. More information can be found online at

gualificationswales.org/english/gualified-for-the-future.

## Who needs to engage in the assessment process?

Active engagement between the learner and practitioner on a regular basis is at the heart of supporting learner progression. To be truly effective, all those involved with a learner's journey need to collaborate and work together. The foundation for this engagement and partnership is establishing:

- where learners are in their learning
- where they need to go in their learning
- what needs to be done for them to get there, taking account of any barriers to their learning.

Schools must design, adopt and implement a curriculum that enables learners to realise the four purposes, providing for appropriate progression for all learners. Therefore, supporting learner progression is a matter for consideration by individual schools. To fully support progression along the 3 to 16 continuum, schools should also work collaboratively in their clusters and, where appropriate, across wider networks.

The main participants in the learning process, of which assessment is a fundamental part, are leaders, practitioners, learners, parents/carers and external partners. More information on each of these main participants is detailed below.

#### Leaders

The role of leaders is to establish a strong learning culture which supports and challenges practitioners to enable learners to make appropriate progress.

This should be achieved through:

- creating an environment based on mutual trust and respect, rather than one focused on compliance and reporting
- enabling practitioners to develop the knowledge and skills necessary to carry out their role in assessment effectively
- developing and embedding processes and structures that enables practitioners to develop a shared understanding of progression
- ensuring the development and review of a curriculum which affords opportunities for practitioners to plan purposeful learning that addresses the needs of each learner
- ensuring there is a clear picture of learner progression within the school that is understood by all practitioners – a process that should not lead to additional burden being placed on practitioners or learners
- considering how additional challenge and support for the learner can be best provided, including working with other partners
- encouraging engagement between all participants in the learning and teaching process in order to develop effective partnerships
- ensuring that due regard has been paid to the statutory requirements and guidance for assessment, and that practitioners are taking account of this in planning learning and teaching and within daily practice.

#### **Practitioners**

The role of the practitioner is to plan for and provide effective learning experiences which are appropriate to the age and development of each individual learner. They should enable learners to appreciate where they are in their learning, where they need to go next and how they will get there. Practitioners should support and challenge learners effectively to ensure they each make progress.

This should be achieved through:

- being clear about the intended learning and planning engaging learning experiences accordingly
- sharing intended learning appropriately with learners
- evaluating learning, including through observation, questioning and discussion
- providing relevant and focused feedback that actively engages learners, encourages them to take responsibility for their learning, and which moves their learning forward
- encouraging learners to reflect on their progress and, where appropriate, to consider how they have developed, what learning processes that they have undertaken and what they have achieved
- providing opportunities for learners to engage in assessing their own work and that of their peers, and supporting them to develop the relevant skills to do this effectively
- developing learners' skills in making effective use of feedback to move their learning forward
- involving parents/carers in learner development and progression, with the learner's involvement in this dialogue increasing over time
- engaging in dialogue with leaders and fellow practitioners to ensure they have a clear picture of the progress being made within their school
- identifying any additional challenge or support learners may require, engaging with external partners where necessary.

#### Learners

The role of the learner is to contribute and participate in the learning process, in a way that is appropriate to their age and stage of development. This will help them to develop knowledge, skills and understanding, and apply them in different contexts.

As they make progress along the continuum and with increasing independence learners should be supported and encouraged to:

- understand where they are in their learning and where they need to go next
- develop an understanding of how they will get there
- respond actively to feedback on their learning
- review their progression in learning and articulate this both individually and with others
- reflect on their learning journey and develop responsibility for their own learning over time.

#### Parents/carers and external partners

Parents/carers and external partners have an important role to play and schools should engage with them so that they can support learner progression in an appropriate way.

Schools should encourage and enable parents/carers to:

- engage regularly with the school and its practitioners in order to understand and support their child's progression in learning
- share relevant knowledge and understanding with the school and its practitioners, which will support their child's learning and progression
- respond actively to information provided about their child's learning and, in collaboration with the school, plan ways of supporting that learning within and outside school.

Schools should engage external partners to:

- help practitioners assess and identify the needs of learners who may require additional support and then help them through the provision of advice and support – this may include specialist educational support and/or support from other agencies (e.g. health services)
- provide information on learning progression that has taken place and been assessed in other contexts (e.g. for learners in joint placements between a school and another setting).

## **Evaluation and improvement arrangements and assessment**

This guidance is about assessment, which is focused on learner progression. Evaluation and improvement arrangements within the education system are separate but can influence how assessment is perceived and how it is undertaken. We are therefore changing our evaluation and improvement arrangements so that they support the realisation of Curriculum for Wales.

The new evaluation and improvement arrangements aim to drive behaviours which positively support and enable our vision for curriculum and assessment as part of a self-improving system. Practitioners and school leaders should have the confidence to learn and improve their practice continually. This will enable them to thrive in a supportive and collaborative environment that will raise standards and ensure every young person can fulfil their potential.

At the heart of the evaluation and improvement arrangements is effective self-evaluation. This makes a vital contribution to raising the quality of education and standards of achievement. To support this, we are continuing to work with key stakeholders to further develop and refine a National Evaluation and Improvement Resource (NEIR) which aims to bring national consistency to self-evaluation across Wales. It will draw best practice from across the education sector and be of value and practical use to schools in support of their approaches to self-evaluation. It will promote a culture of professional reflection, dialogue and learning, and will have a role in building capacity across the system to support the reform journey.

Self-evaluation will encourage schools to reflect on their approaches to planning, developing and implementing their curriculum and assessment arrangements. It will enable schools to further develop learning and teaching to ensure they are effective in supporting learner progression. These developments, in turn, will then be reflected in daily practice.

More information on proposals for how schools should be held to account can be found online at <u>gov.wales/school-evaluation-and-improvement-accountability-arrangements</u>.

#### School target-setting

School targets should stem from the ongoing evaluation of a wide range of information and the work of the school as a whole, reflecting strengths and areas for improvement, focusing resources on raising outcomes for learners, and supporting progress for all learners.

The Welsh Government has been clear in its expectation that school targets should only be used to support self-evaluation and improvement planning at a school level. They should not be aggregated up to a local authority or regional measure of performance that is then used to hold schools to account. Nor should they be used to draw comparisons between schools; in fact, to do so would be counterintuitive to a self-improving system.

While self-evaluation and target setting within a school may consider information gathered through individual learner assessment, these activities should not be conflated with external accountability at local authority, regional or national level.

More information on proposals for how schools should be held to account can be found online at

gov.wales/regulations-governing-school-level-performance-and-absence-targets.

## Planning for assessment within a school curriculum

The principles of progression and the descriptions of learning, articulated in Curriculum for Wales guidance, are intended to guide curriculum design and learning and teaching, with assessment being an integral part of both.

Assessment arrangements at a school level are a matter for each school to determine as part of designing their own curriculum. This should be appropriate for the needs of all their learners. Within each school's curriculum, assessment arrangements will need to be designed, planned and delivered in accordance with the following.

- Statutory requirements These are the legal duties which must be undertaken by law. The proposed duties for schools are set out in 'The law' section of Curriculum for Wales guidance (at <u>hwb.gov.wales/curriculum-for-wales/summary-of-legislation</u>).
- Statutory guidance, including the key principles of assessment (as outlined in this guidance) These are the elements which headteachers and governing bodies must have regard to when planning for learning at both school level and classroom level.
- School design These are the elements that each school may choose to develop and implement to support assessment, in addition to the above. As part of this, schools should consider taking forward collaborative approaches through participation in clusters and wider networks.
- Individual learner needs These are the elements which a school may choose to implement to support the needs of individual learners in order to provide additional challenge or support.

There are a number of fundamental matters that schools should consider when designing their curriculum and providing learning experiences in the classroom. These are as follows.

#### Breadth and depth

- Assessment should be an ongoing process that is embedded within day-to-day practice and is fundamental to the learning process.
- Progression in learning is a process of increasing sophistication, rather than being about a body of content to be covered. Progression is not linear and different learners are likely to progress in markedly different ways. Assessment, built into the school curriculum, should recognise this and allow for a variety of diversions, stops and spurts in a learner's journey.
- Learners should be assessed in relation to the school curriculum, which will have been designed to reflect the national principles of progression, drawing on the descriptions of learning. Practitioners should assess all learners across the 3 to 16 continuum based on the progression articulated in their school curriculum. In doing so, they should take into account the diverse needs of individual learners.
- Schools should not undertake specific assessment activities at each progression step to make a judgement about a learner's progression at a set age or point in time.

- The purpose of the descriptions of learning is to provide guidance on the pace of progression in order to support practitioners and inform curriculum design and learning and teaching. They are not a series of criteria to be directly assessed against, nor can they be met with single assessment tasks.
- As part of the learning process, practitioners and learners should develop an understanding of how each learner learns and what their attitude and approach to learning is, in order to support their continued progress and to foster commitment to their learning.

#### Approach

- When a learner enters a school at any point, the school should ensure they understand where they are in their learning and the progression they have made to date. This understanding should be used to identify the learner's starting point and how the school can best move learning forward. Practitioners should take account of information provided by those who have previously supported the education of the learner.
- Assessment is key to supporting 'deep' learning and should be used to identify whether a learner needs to consolidate learning, whether further support is needed and/or whether the learner can progress to the next steps in learning.
- Observational assessment should be used and practitioners should look for evidence of embedded learning to assess what a learner can do consistently and independently in a range of learning experiences. This should be informed by a good understanding of child development.
- As learners progress along the 3 to 16 continuum, they should engage more directly in the assessment process. Practitioners should provide opportunities for learners to undertake peer-assessment and self-assessment, supporting them to develop these skills in a way which is appropriate to the developmental stage of each learner.
- Schools should plan a range of assessment methods and techniques that are fit-forpurpose and support progression across the breadth of the curriculum. Some of these may be distinctive to individual areas of learning and experience, some may apply across more than one area, and others may be specific to learners with additional needs.
- Assessment methods and techniques should be selected, and adapted where appropriate, according to the needs of the learner. This should take into account the developmental stage and any barriers to learning, ensuring that each learner is able to demonstrate progress in line with their individual ability.
- Statutory online personalised assessments are designed to help the practitioner and learner understand how a learner's reading and numeracy skills are developing and what the next steps should be. Online personalised assessments are designed to support learning and teaching and are not to be used for the purpose of external accountability.

#### **Recording learner progress**

When designing their curriculum, schools should consider what assessment information needs to be gathered and recorded in order to gauge progress in learning, along with when this should take place and in what level of detail.

Headteachers should ensure that the information gathered on learner progression is proportionate and is only used within the school to directly support learner progression and inform teaching. It should not be used for the purposes of external accountability. It may be drawn upon to:

- inform communications and engagement activity with parents/carers
- support the transition of learners along the 3 to 16 continuum
- help practitioners and leaders develop their understanding of progression
- inform curriculum development and inform future learning and teaching
- identify where improvement and support are needed as part of the school's selfevaluation process.

# Developing a shared understanding of progression within and across schools

Progression is a fundamental aspect upon which school curricula, and therefore assessment arrangements, are designed and planned. To deliver equity for learners across Wales, it is essential that there is a shared understanding of progression, including expectations around what progression may look like and the pace at which learners may progress. This shared understanding should be developed through both professional learning and as an ongoing process both within and across schools, of which professional dialogue is a fundamental aspect.

Professional dialogue for this purpose provides opportunities for leaders and practitioners to share and reflect on the impact of their school curriculum, their experiences of the learning process and of supporting all learners to progress. This enables them to learn from each other and support a process of continuous improvement. This forms part of, and builds upon, the interactions which take place on a daily basis as part of learning and teaching, e.g. learner to learner, learner to practitioner and practitioner to leader. It will help leaders and practitioners to understand the impact that learning and teaching has upon all those involved.

During the process of developing a shared understanding of progression, leaders and practitioners should consider:

- how their school has designed its curriculum and assessment arrangements to reflect the principles of progression, guided by the descriptions of learning
- the impact this has had upon teaching
- the impact this has had upon individual learners and how this is demonstrated in their progression and the outcomes of their learning
- the process of learning, i.e. how their learners are learning.

The insight and understanding gained as a result of this professional dialogue should inform each school's self-evaluation process, helping define future priorities for leadership, curriculum design and learning and teaching.

#### Professional dialogue within a school

Schools must develop and embed a process and structures that enable the staff within their school to develop a shared understanding of progression as articulated in the principles of progression, drawing on the descriptions of learning and broader Curriculum for Wales guidance. As part of this, schools should ensure that all practitioners have the opportunity to take part in professional dialogue for this purpose within their school. This process should also ensure that this understanding is reflected in the development and refinement of both the school curriculum and daily practice.

This should be an ongoing process that takes account of the full breadth of the school curriculum.

#### Professional dialogue between schools

Professional dialogue between schools for the purpose of developing a shared understanding of progression should also be a continuous process that takes account of the full breadth of the curriculum. It should build upon the professional dialogue that has taken place within schools, and should enable schools to learn from each other.

Schools must work with their cluster to put appropriate arrangements and processes in place to support this, with each school participating on an equal basis. The cluster should work together to establish the most effective ways of working.

Schools should belong to at least one other group in addition to their cluster, for the purpose of developing a shared understanding of progression. Secondary schools are expected to ensure they are a member of a group which has at least one other secondary school in its membership. This is to support greater consistency in the understanding of progression across the latter part of the learning continuum and ensure schools are involved in meaningful discussions that cover the full breadth of the 3 to 16 continuum.

#### Professional dialogue involving funded non-maintained settings

Schools should encourage providers of funded non-maintained nursery education to become members of a group whose remit is to develop a shared understanding of progression and to participate in the professional dialogue that takes place as part of this process. This will help both settings and schools to understand learner progression across the full 3 to 16 continuum in a way that is appropriate to learners at all stages of development.

#### Inputs to support professional dialogue

Professional dialogue for the purpose of developing a shared understanding of progression may consider the following inputs.

- Examples of school curriculum.
- Examples of classroom planning.
- Examples of learning and teaching activities.
- Examples of learning both processes and outcomes.
- Examples of additional support provided.

Examples should not be produced specifically for this process.

#### Learner involvement

Learners should have an input to the process, where possible, by providing evidence of their progression and self-reflection. Input should be sought from a range of learners and their individual learning progression.

#### Outcomes

Schools should ensure that the outcomes of this process are considered as part of their ongoing self-evaluation process and are used to reflect upon their curriculum design and planning process.

#### Role of the local authority and regional consortia

The local authority and regional consortia have an important role in ensuring that all practitioners have an opportunity to participate in meaningful professional dialogue for the purposes of developing a shared understanding of progression. This role should be supportive, building upon the practices already established at school and cluster level, and should not be about external accountability. They will also have an important role in helping to identify and share good practice.

## Transition along the 3 to 16 continuum

The learner should be at the centre of the transition process. Effective transition is about supporting all learners along the learning continuum, as they move between different groups, different classes, different years and different settings. Ensuring the well-being of all learners should be an important and integral part of the process, recognising the needs of individuals, while also supporting both continuity and progression in their learning. The understanding of each individual learner gained from assessment is essential in supporting this process.

#### **Transition planning**

Headteachers and governing bodies should ensure that transition arrangements are considered when school curricula are designed and planned. This includes developing and embedding a robust and effective process for the transition of learners along the 3 to 16 continuum. This should be an ongoing process, which recognises the diverse needs of all learners and supports each individual in their learning journey.

In order to meet the needs of all learners within their cluster, schools must jointly plan to support learner progression, with a focus on effective communication between practitioners, learners and their parents/carers. This should build upon any curriculum and assessment planning that takes place across the cluster.

To support this process and ensure the well-being of learners:

- primary schools should engage with leaders of funded non-maintained settings
- primary and secondary schools should engage with each other
- primary and secondary schools should engage with leaders of PRUs.

Secondary schools are also encouraged to engage with leaders of post-16 settings, e.g. further education institutions.

Information shared as part of the transition process should focus on the overall needs and well-being of the learner. In addition, a clear, holistic picture of the learner's progression across the school curriculum should be provided to support their continuing journey along the continuum of learning. This should be provided alongside the history of any additional challenge or support provided.

#### Learner involvement

Learners should be involved in the transition process to provide insight into what motivates them, what their preferences are, how they learn, what barriers there may be to their learning, what their strengths and areas for development are, as well as to suggest potential next steps.

## Communicating and engaging with parents/carers

Communicating effectively with parents/carers on an ongoing basis is an important way to foster positive relationships in order to engage them in purposeful and meaningful dialogue. When undertaken well, this can help aid learner progression by helping parents/carers to understand how they can support learning within and outside the school environment. Consideration should also be given to other people who are important for a learner, such as their advocate or social worker.

Schools should develop and implement processes to support effective two-way communication and engagement with parents/carers. When developing these processes, consideration should be given to using a wide variety of different communication means, e.g. face-to-face, digital, written, etc.

In terms of individual learner information, what should be shared with parents/carers, how and when during the school year is a decision for schools. However, care should be taken to ensure that any information provided is done so in a timely, open and fair manner. Information on any support, interventions or additional needs required for the learner's development should also be shared.

#### Learner involvement

Headteachers should ensure that learners are provided with opportunities to contribute to the communication process. Where possible, learners should be enabled to gather examples of their learning, articulate their own progress and achievements, and convey their aspirations and views on the next steps in their learning. Ideally this should be a three-way communication process between the learner, their parent(s)/carer(s) and practitioners.

#### Additional learner plans

Where a learner has an individual learning plan, including a formal individual development plan (IDP), the communication and engagement process should take this into account and ensure the parent/carer is aware of the plan, its contents and any additional support they may need to provide. Formal IDPs should be created in collaboration with the learner and/or their parent(s)/carer(s).

#### **Reporting learner progression**

As part of this communication and engagement process, schools must ensure they formally report to parents/carers at least once a year for all learners aged 3 to 16. This should be timed to allow for further discussions to take place between practitioners, the learner and their parents/carers and for next steps to be put in place.

The formal report must include the following information about each learner:

- their overall well-being
- their progress in learning across the breadth of the curriculum
- next steps required to support their progression
- their attendance.

Schools may choose to communicate the above information through more than one report or on more than one occasion during the year if they wish.

The information provided should be individually-tailored to the learner and be focused on supporting their development and progression. It should not contain descriptions of the topics and learning activities the learner has undertaken, unless this is to provide context. To ensure the information can be easily understood by its intended audience, it should be concise and jargon-free.

While the provision of the personalised assessment reports to parents/carers is a statutory requirement, this is only a small element of what may be provided and should be considered in the context of the wider communication and engagement process with parents/carers.

# Glossary

Abstract	(Haniaethol) Existing in thought or as an idea but not having a physical or concrete existence.
Additive relationships	(Perthnasoedd adiol) Quantities that can be expressed as related to each other through addition or/and subtraction.
Advocate	(Eirioli) To publicly support a specific cause or policy.
Algebraic	(Algebraidd) Refers to the uses of objects that are not numbers instead of unknown values to make numerical calculations.
Algorithm	(Algorithm) A process or set of instructions to be followed in calculations or other problem-solving operations, especially by a computer.
Analyse	(Dadansoddi) Look for patterns, underlying assumptions, reasons for, and effects of, the way the topic is handled.
Arrays	(Araeau) Diagrams showing a multiplication sum arranged as an array. For example 5 × 4 can be thought of as 20 counters arranged into 5 rows and 4 columns.
Artist	(Artist) Person who creates work in any of the disciplines, also including the learners themselves.
Associative	(Cysylltiadol) A law used to describe mathematical operators that give the same answer when grouped in different ways. The addition and multiplication of numbers are associative, for example $2 \times (4 \times 3) = (2 \times 4) \times 3$
Attitudes	(Agweddau) A settled way of thinking or feeling about something.
Authentic contexts	(Cyd-destunau dilys) Contexts which are meaningful for learners and reflect real-world experiences.
Authentic experience	(Profiad dilys) A real-life learning experience and context.
Basic concepts in language	(Cysyniadau sylfaenol mewn iaith) words that denote location (for example: up or down), amount (for example: more or less), descriptions (for example: big or little) and feelings (for example: happy or sad).
Biases	(Rhagfarnau) A strong feeling in favour of or against one group of people, or one side in an argument, often not based on fair judgement.
Bilingual	(Dwyieithog) Bilingualism refers to the knowledge and use of two languages or the presence of two languages within a given society. The learner may have varying proficiencies in these languages and use them in different contexts with different people.

Body of knowledge	(Corff o wybodaeth) The knowledge that shapes and informs the creative process and its analysis.
Body of skills	([Corff o] sgiliau) The skills that shape and inform the creative process and its analysis.
CAMAU	(Camau) The Welsh word for 'steps', CAMAU is the joint University of Wales Trinity St David and University of Glasgow project which supported the development of progression in the Curriculum for Wales.
Cardinal	(Prifol) A number denoting quantity (one, two, three, and so on), as opposed to an ordinal number which describes the position of something in a sequence (first, second, third, and so forth).
Circular design	(Dylunio cylchol) A concept where products are designed so they save or reuse resources; they can easily be repaired and used for longer periods of time.
Coefficient	(Cyfernod) A number that appears before the variable or variables in an algebraic term. In the term $5x^2$ , the coefficient is 5 and the variable is x. In the term $y^3$ , the coefficient (not written) is 1 and the variable is y.
Community languages	(leithoedd cymunedol) Languages, other than Welsh and English, used by a minority group or community within a majority setting.
Commutative	(Cymudol) A law used to describe mathematical operators that give the same answer, even if the order in which we input the numbers are changed. The addition and multiplication of numbers are commutative. That is $a + b = b + a$ and $a \times b = b \times a$ .
Compound measures	(Mesurau cyfansawdd) These combine two or more different units of measure to form a new unit of measure. For example, distance can be measured in miles and time in hours. We can combine these measures to form the compound measure speed which is measured here in miles per hour.
Computations	(Cyfrifiannau) The process of making one or more calculations.
Concrete	(Diriaethol) Existing in a material or physical form; not abstract.
Conjecture	(Dyfaliad) An opinion or conclusion formed on the basis of incomplete information.
Constant	(Cysonyn) A value which does not vary, for example a fixed number.
Conventions	(Confensiynau) A set of cultural expectations that shape meaning for an audience.
Core learning	(Dysgu craidd) The statements of what matters in learning, the principles of progression and the descriptions of learning for each area of learning and experience.

Creative and cultural industries	(Diwydiannau creadigol a diwylliannol) Sectors of the economy which use creative talent for commercial purposes.
Creative process	(Proses greadigol) The means by which creative work is made.
Creative response	(Ymateb creadigol) A creative reaction to stimulus.
Creative texts	(Testunau creadigol) Artistic objects or products that provide a platform for meaning and expression (anything that is produced via creative means, not just written texts).
Creative work	(Gwaith creadigol) The output of the creative process.
Cues	(Ciwiau) gestures, body language or other non-verbal forms which convey meaning.
Cynefin	(Cynefin) The place where we feel we belong, where the people and landscape around us are familiar, and the sights and sounds are reassuringly recognisable. Though often translated as 'habitat', cynefin is not just a place in a physical or geographical sense: it is the historic, cultural and social place which has shaped and continues to shape the community which inhabits it.
Decode	(Dadgodio) Use letter-sound relationships to pronounce written words.
Deduction	(Dod i gasgliad) Linking together different, explicit pieces of information and drawing a conclusion.
Design principles	(Egwyddorion dylunio) In this context, this means definition, analysis, design, implementation, testing and maintenance.
Design thinking	(Meddylfryd dylunio) An iterative process to seek to understand the user, challenge assumptions, and redefine problems in an attempt to identify alternative strategies and solutions that may not be instantly apparent with initial levels of understanding.
Dialect	(Tafodiaith) A regional or social variety of a language distinguished by pronunciation, grammar or vocabulary.
Digital competence	(Cymhwysedd digidol) The set of skills, knowledge and attitudes that enable learners to use technologies and systems confidently, creatively and critically.
Digital humanities	(Dyniaethau digidol) The use and application of computational and digital tools, resources and methods to the study of humanities.
Discipline- specific vocabulary	(Geirfa benodol i'r ddisgyblaeth) Specialist terms and concepts appropriate to each of the disciplines in the Expressive Arts Area. Common words may differ in meaning across the different disciplines.

Discriminate phonemes	(Gwahaniaethu ffonemau) refers to the ability to distinguish the vowels and consonants, also known as phonemes, which form the words of a language.
Discriminate sounds	(Gwahaniaethu synau) The most basic level of auditory discrimination is hearing the difference between sounds in our environment, for example: being able to identify the sound of a car passing.
Disruptive technologies	(Thechnolegau aflonyddgar) Innovations that significantly alter the way that consumers, industries, or businesses operate. For example, e-commerce, mobile technologies.
Distributive	(Dosbarthol) Refers to a law that states that multiplying a number by a group of numbers which have been added together is the same as adding each multiplication separately: $a(b + c) = a \times b + a \times c$ .
Ecosystems	(Ecosystemau) Biological communities of interacting organisms and their physical environment.
Empathy	(Empathi) The ability to understand and share the feelings of another.
English as an additional language (EAL)	(Saesneg fel iaith ychwanegol (SIY)) Refers to learning and teaching English when neither Welsh nor English is the learner's first language.
Epistemic	(Gwybodaeth epistemig) Of or having to do with knowledge or the act or ways of knowing.
Ethical and legal considerations	(Ystyriaethau moesegol a chyfreithiol) Consideration of the moral, legal and cultural consequence of a creative product in terms of both its production and its potential artistic impact.
Ethical considerations	(Ystyriaethau moesegol) Relating to ethical and moral principles.
Etymology	(Etymoleg) The origin and history of a word or words.
Experiences	(Profiadau) The combination of knowledge and skills in a learning environment to further progress learners towards the curriculum purposes.
Exponentiation	(Esbonyddu) The operation of raising one quantity to the power of another.
Exponents	(Esbonyddion) The number of times a number is multiplied by itself. For example, 2 to the 3rd (written like this: $2^3$ ) means: 2 x 2 x 2 = 8
Expressive arts	(Celfyddydau mynegiannol) Art, dance, drama, film and digital media and music.
Factors	(Ffactorau) Something that effects an event, decision or situation. In humanities, factors are often categorised as political, economic, social, technological, legal, environmental, or religious.

Fine motor movements	(Symudiadau echddygol manwl) Skills that requires delicate muscular control in which certain parts of the body move within a limited area in order to produce accurate responses.
First degree	(Unradd) These are equations where the highest exponent is 1. Linear equations are examples of first degree equations.
Fluent readers	(Darllenwyr rhugl) Fluent readers draw on a range of strategies to read with speed, accuracy, expression and understanding.
Forces	(Grymoedd) A push or pull upon an object resulting from its interaction with another object.
Form	(Ffurf) Medium and structure of creative or artistic expression, such as paintings, sculptures, plays, improvisations, dances, songs, and performances.
Function	(Ffwythiant) A relation between two sets that associates a unique member of the second set with each member of the first set.
Genre	(Genre) Style or category of creative expression (including literature) which shares the same characteristics.
Geographical information system	(System gwybodaeth ddaearyddol) A system designed to capture, store, manipulate, analyse, manage and present spatial or geographical data.
Governance	(Llywodraethu/Llywodraethiant) The systems and ways in which countries, communities and organisations are led and managed.
Grammar	(Gramadeg) The way in which language works to create meaning. All language varieties have a role to play in society. Learners should try to become linguistically informed about each of them, while recognising that the standard variety has a special place, for historical and social reasons.
Grapheme- phoneme correspondence	(Cyfatebiaeth graffem-ffonem) The links between letters, or combinations of letters (graphemes), and the speech sounds (phonemes) that they represent. Phonemes are the smallest sound units of speech.
Gross motor movements	(Symudiadau echddygol bras) Skills that involve the action of many large muscles and requires movement of the whole body, e.g. running.
High-frequency words	(Geiriau aml eu defnydd) Words which occur most often in a language. Many of them are very common (for example the, and, is) and recognising them can help a reader to develop fluency.
Home languages	(leithoedd cartref) Languages, other than Welsh and English, used by learners outside the school environment.
Identity	(Unfathiant) This shows that the value of two expressions is always equal, regardless of the value of any variables used. The symbol for 243

	an identity has three horizontal lines, not two as does an equals sign. An example of an identity is $2(x + 3) \equiv 2x + 6$
Ideology	(Ideoleg) A system of ideas and ideals, or a set of beliefs and characteristics of an individual or social group, which can form the basis of theory or policy such as economic or political.
Idiolect	(Priodiaith) A person or group's unique way of speaking.
Idiomatic language	(laith idiomatig) Using words and expressions in a way that sounds natural to native speakers of the language, for example in Welsh: fel arfer, o dro i dro; in English: on the contrary, get over something; and in French: J'ai 10 ans.
Inequality	(Anhafaledd) This contains two expressions separated by one of the following symbols: <, >, $\leq$ or $\geq$ . The symbol < represents less than. The symbol > represents greater than. The symbol $\leq$ represents less than or equal to. The symbol $\geq$ represents greater than or equal to.
Infer	(Casglu ystyr) To deduce or work something out from evidence and information.
Inference	(Dehongli) Understanding information or views which are not explicitly stated.
Integer	(Cyfanrif) Any number without a fractional or decimal part, for example 8 or -4. Integers include the whole numbers, zero, and the negative of the whole numbers.
Interdependencie s	(Rhyng-ddibyniaethau) Describes the mutual relationships, reliance and interactions between and within environments, social, political and economic phenomena.
International languages	(leithoedd rhyngwladol) refers to languages other than Welsh and English which are learned at school and which can include community languages, modern languages, classical languages and British Sign Language.
Interpretation	(Dehongliad) An explanation or way of explaining something. An individual's opinion based on evidence which they've seen.
Inter- relationships	(Rhyng-berthnasau) Describes the links, connections and interactions between phenomena. In humanities, this includes links between and within disciplines, over time, space, cultures and religions.
Inverse	(Gwrthdro) Mathematical inverse is the opposite. We can think about this in the context of mathematical operations. Addition is the inverse of subtraction, for example: $5 + 6 = 11$ . We can reverse this by subtracting: $11 - 6 = 5$ . Therefore, $5 + 6 - 6 = 5$
Knowledge	(Gwybodaeth) Facts, information and skills aquired through experience or education; the theoretical or practical understanding of a discipline.

Life cycles	(Cylchoedd bywyd) The continuous sequence of changes an organism undergoes from the start of life through to the end of life.
Linear	(Llinol) This refers to an algebraic term or terms to the power 1 (the 1 isn't usually written down). Examples of linear terms are x, 4y and – 9z. The opposite of 'linear' is non-linear.
Literacy	(Llythrennedd) A set of skills, including speaking, listening, reading and writing, which enable us to make sense of the world around us. Literacy skills allow us to understand written and spoken language, to interpret what has been written or said, and draw inferences from the evidence. It is also about being able to communicate fluently, cogently and persuasively.
Literature	(Llenyddiaeth) spoken, written and visual materials which are works of creative imagination, such as poetry, drama, fiction and non-fiction from different periods and cultures. These should be sufficiently rich and substantial to engage learners intellectually and emotionally, encourage them to be inspired, moved and changed, and extend their interest and enthusiasm for literature.
Low-fidelity and high-fidelity prototyping	(Prototeipio manwl a bras) Low-fidelity prototyping is a quick way to translate high-level design concepts into tangible and testable artefacts in order to test prototype functionality. High-fidelity prototyping is highly functional, close to the final product.
Manipulatives	(Trinolion) Physical tools for teaching, engaging learners visually and physically with objects, such as coins, blocks, rods, puzzles etc
Mathematical models	(Modelau mathemategol) Descriptions of using mathematical concepts and language. They may help to explain a system, to study the effects of different components, and to make predictions about behaviour
Matter	(Mater) Physical substance which forms materials.
Measures of central tendency	(Mesurau canolduedd) These are mean, median and mode.
Measures of spread	(Mesurau gwasgariad) Used to describe the variability in a sample or population, for example: the range.
Mediate	(Cyfryngu) Communicate meaning from one person to another, within the same language (paraphrasing, summarising) or from one language into another (translating, interpreting). The learner assists people to communicate with one another by relaying, explaining or translating information or ideas.
Metacognition	(Metawybyddiaeth) The processes learners use to plan, monitor, and assess their understanding and performance in learning.
Metacognitive	(Metawybyddol) Description of the processes learners use to plan, monitor, and assess their understanding and performance in learning.

Model	(Model) A representation of a system, made of concepts used to help people know, understand, or simulate what the model represents.
Multilingualism	(Amlieithrwydd) The knowledge and use of a number of languages or the presence of several languages within a given society. The learner may have varying proficiencies in these languages and use them in different contexts with different people.
Multimodal texts	(Testunau amlfodd) Texts that have more than one mode, such as print and image (still or moving) or print, image, sound and movement to create meaning. Most of the texts we use in everyday life are multimodal, for example newspapers, magazines, websites, and social media sites.
Multiplicative relationships	(Perthnasoedd lluosol) Quantities that are related to each other through multiplication or division.
Mutually exclusive	(Cyd-anghynhwysol) Refers to events which cannot happen at the same time. For example, when we throw a dice, throwing 6 and throwing 1 are mutually exclusive.
Nominal	(Enwol) A number used only as a name or to identify something, not as an actual value or position. For example the number of a bus or the number on the back of a sports player.
Non-examples	(Anenghreifftiau) These do not satisfy a rule or a definition. They provide more information about what is, and what is not included in a rule or definition. Non-examples of a triangle would include a square and an open three-sided polygon.
Non-linear	(Aflinol) Refers to an algebraic expression that is not a linear expression.
Non-standard units	(Unedau ansafonol) Units of measurement that are not typically used, such as a pencil, an arm or a shoe.
Number bonds	(Bondiau rhif) This is a mental picture of the relationship between a number and the parts that combine to make it.
Numeracy	(Rhifedd) The application of mathematics to solve problems in everyday life.
One-to-one correspondence	(Cyfatebiaeth un-i-un) Each member of one set is associated with a member of another set.
Operator	(Gweithredydd) A symbol (such as +, −, ×, ÷) that shows an operation.
Ordinal	(Trefnol) A number which describes the position of something in a sequence. For example: first (1st), second (2nd), third (3rd), fourth (4th), tenth (10th), twentieth (20th).

Perceptions	(Canfyddiadau) The ability to become aware of something through the senses.
Philosophical	(Athronyddol) Relating or devoted to the study of the fundamental nature of knowledge, reality and existence.
Phonics	(Ffoneg) The study of the way in which symbols represent the sounds that make up words. Phonics teaching or instruction is a set of approaches to the initial teaching of reading and writing, which focus on the relationship between letters and sounds.
Phonological awareness and phonemic awareness	(Ymwybyddiaeth ffonolegol ac ymwybyddiaeth ffonemeg) Phonological awareness is usually understood as the ability to distinguish features of speech, such as syllables, onset-rime and phonemes. Phonemic awareness is a subset of phonological awareness which concerns the listener's ability to distinguish and manipulate the smallest, meaningful elements of sound in words.
Physical device	(Dyfais ffisegol) Digital solutions, for example laptops, tablets, phones.
Place	(Lle) A position, point or area of space; a location which has an identity and meaning created by people.
Planned obsolescence	(Anarferiant bwriadus) Planning or designing a product with an artificially limited life so it becomes unfashionable or non-functional after a certain period of time.
Pluralistic	(Lluosogol) A system in which two or more worldviews, groups, principles, sources of authority, etc., coexist.
Plurilingual	(Lluosieithog) The knowledge, use and connection made between a number of languages. Learners may have varying proficiencies in these languages, from passive knowledge or single word understanding to advanced fluency. The learner is able to make connections between languages, appreciate their interrelation and practise using them individually or together.
Principles of progression	(Egwyddorion cynnydd) The research-based statements of progression used to develop progression in the Curriculum for Wales. They include overarching statements, which can be found in the designing your curriculum section, and statements for each area of learning and experience. Collectively they form the Progression Code.
Proof	(Prawf) A mathematical proof is an argument that deduces the statement that should be proved, from other statements that are known to be true.
Proportional reasoning	(Rhesymu cyfrannol) Solving problems involving proportional change in which quantaties have a multiplicative rather than an additive relationship.

Pro-social	(Er lles y gymdeithas) Behaviour which is positive, helpful and intended to promote social acceptance and friendship.
Qualitative	(Ansoddol) Qualitative data are measures of 'types' and may be represented by a name, symbol, or a number code.
Quantitative	(Meintiol) Quantitative data are measures of values or counts and are expressed as numbers. Quantitative data are data about numeric variables (for example: how many, how much or how often).
Reactions	(Adweithiau) Chemical processes in which substances act mutually on each other and are changed into different substances, or one substance changes into other substances.
Reciprocal	(Cilydd) The multiplicative inverse of any number, excluding zero (which does not have a reciprocal). For example, the reciprocal of 3 is 1/3, and the reciprocal of 2/3 is 3/2
Recurring decimals	(Degolion cylchol) A decimal which has an infinite number of digits. An example is 0.133333333 It could be written as 0.13
Register	(Cywair) The style of language, grammar, and words used for particular situations.
Represent	(Cynrychioli) Stand for something else or on its behalf. Representation may be abstract or 'realistic' in terms of the way it is implemented.
Representation	(Cynrychioliad) The description or portrayal of someone or something in a particular way.
Resilience	(Gwydnwch) The ability to respond positively to difficulties.
Schools	(Ysgolion) Funded maintained schools in Wales.
Segment and blend	(Segmentu a chyfuno) Segment is the breaking into individual parts, such as separating words in a sentence, separating compound words, separating syllables in a word or hearing individual phonemes in a word. Blending involves merging together constituent sounds or syllables within a word.
Self-awareness	(Hunanymwybyddiaeth) Conscious knowledge of one's own character, feeling, motives and desires.
Self-regulate	(Hunanreoleiddio) The ability to focus attention, control emotions, and manage thinking, behaviour and feelings.
Sequence of instructions	(Cyfresi o gyfarwyddiadau) Algorithm.

Sequential data- handling cycle	(Cylch trin data dilyniannol) The process of (1) specifying the problem and planning; (2) collecting data from a variety of sources; (3) processing and representing data; (4) interpreting and discussing data; (5) evaluating the process.
Settings	(Lleoliadau) Funded non-maintained settings in Wales.
Significant figures	(Ffigyrau ystyrlon) Each of the digits of a number that are used to express it to the required degree of accuracy, starting from the first non-zero digit.
Skills	(Sgiliau) The ability to undertake activities that require application of knowledge, increasing in expertise and competence.
Social action	(Gweithredu'n gymdeithasol) This is about an individual or a group of people deliberately taking action that results, or is intended to result, in a change.
Social influences	(Dylanwadau cymdeithasol) Any process whereby a person's attitudes, opinions, beliefs, or behaviour are altered or controlled.
Social justice	(Cyfiawnder cymdeithasol) Fairness in terms of the distribution of wealth, opportunities and privileges for people within society.
Social norms	(Normau cymdeithasol) Common standards within a social group regarding socially acceptable or appropriate behaviour in particular social situations, the breach of which has social consequences.
Sonic	(Sonig) The nature of sound and audio production.
Soundscapes	(Seinwedd) Refers to the acoustic environment consisting of natural sounds (for example: animals, weather) and sounds created by humans (for example: music, language, work, and sounds of mechanical origin).
Sources of wisdom and authority	(Ffynonellau o ddoethineb ac awdurdod) Sources of wisdom and authority are the various sources people use in trying to understand something or to make decisions about what to do in life. These might include key texts, teachings, leaders, schools of thought, philosophers, scholars and scientists.
Space	(Gofod) An abstract concept defined by the patterns, distributions and associations of phenomena, and which are given meaning by human activity. Within humanities, there are physical spaces and social spaces which help us understand the relationships between environments, peoples, cultures and economies that exist together and over time on the Earth.
Spiritual relationships	(Cydberthnasau ysbrydol) A sense of connection to something bigger than ourselves; it typically involves a search for meaning in life.

Spirituality	(Ysbrydolrwydd) Spirituality is concerned with the human spirit and that which is beyond the ordinary. It can create meaning and purpose in life. Spirituality can, but does not necessarily, involve religion. Spiritual development can result in a growth of awareness of self in relation to others, the world and, for some people, to a higher power or ultimate reality.
Style	(Arddull) The way in which something is made, communicated or interpreted.
Sustainable development principle	(Egwyddor datblygiad cynaladwy) Acting in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.
Syntax	(Cystrawen) The set of rules, principles, and processes that govern the structure of sentences, including word order.
Synthesise	(Syntheseiddio) Assessing and sorting facts, opinions and ideas from a range of sources and bringing them together to present a consistent and coherent interpretation.
Systems thinking	(Meddylfryd systemau) A holistic approach that focuses on the way that a system's constituent parts interrelate.
Techniques	(Technegau) Specific methods of achieving a creative outcome.
Tolerance	(Goddefiant) An allowable amount of variation of a specified quantity.
Tools and techniques	(Offer a thechnegau) For example: considering existing products, deconstruction, their improvement and testing.
Tools and technologies	(Offer a thechnolegau) A range of digital and non-digital devices and equipment that facilitate creativity.
Translanguaging	(Trawsieithu) Translanguaging is a pedagogical practice that alternates the use of two languages for input and output in the same activity. The learner receives information in one language and works with that information in another language.
Transversal	(Ardrawslin) A line that crosses two other lines.
Ultimate questions	(Cwestiynau eithaf) Questions that focus on the search for meaning, significance and value in life.
Unit fractions	(Ffracsiwn unedol) A fraction where the numerator is 1
Validity	(Dilysrwydd) The extent to which something is sound, reasonable and well founded.
Values	(Gwerthoedd) Principles or standards of behaviour; a person's judgement of what is important in life.

Variable	(Newidyn) A symbol or a letter which either represents an unknown value or whose value can vary.
Vigesimal	(Ugeiniol) The Welsh number system, as with Celtic and some other European languages, traditionally used a base of 20, instead of the more common base of 10. For example, in a vigesimal system 14 is pedwar ar ddeg (4+10), in a decimal system it is un deg pedwar (10+4). Also 40 is deugain (2x20) in a vigesimal system, but pedwar deg (4x10) decimally.
Visual communication	(Cyfathrebu gweledol) Conveying ideas and information in forms that can be seen for example: signs, animation, illustration and graphic design.
Ways of working	(Ffyrdd o weithio) These are: long-term, intergration, involvement, collaboration and prevention.
Welsh as an additional language (WAL)	(Cymraeg fel iaith ychwanegol (CIY)) Refers to learning and teaching Welsh when neither Welsh nor English is the learner's first language.
Whole number	(Rhif cyfan) The numbers 0, 1, 2, 3, 4, and so on are whole numbers. They are similar to integers, but whole numbers do not include negative numbers. Whole numbers do not have fractional parts or decimals left over.
Worldviews	(Bydolygon) A particular philosophy of life or conception of the world. In humanities, worldviews can include historical, political and social philosophies, as well as religious and non-religious worldviews. Worldviews can be institutional or personal. An individual's own way of understanding and living in the world may or may not draw from one, or many, institutional worldviews.