

Knowledge and Understanding of the World




chwarae • dysgu • tyfu
play • learn • grow
cyfnod sylfaen 3–7 foundation phase



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Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Knowledge and Understanding of the World

Audience Headteachers, teachers, practitioners, governing bodies of maintained schools and practitioners and management committees in the non-maintained sector in Wales; local education authorities; teacher unions and school representative bodies; church diocesan authorities; national bodies in Wales with an interest in education.

Overview This guidance supports the Knowledge and Understanding of the World Area of Learning in the *Foundation Phase Framework for Children's Learning for 3 to 7-year-olds in Wales*. The document provides guidance on the skills and knowledge that children acquire, along with case studies on its implementation in settings and schools. The guidance and Area of Learning should not be viewed or delivered in isolation; it should be planned for across the curriculum.

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Background

The proposals in the Welsh Assembly Government's document *The Learning Country: Foundation Phase 3–7 years* included developing a curriculum that linked and strengthened the principles and practice in ACCAC's document *Desirable Outcomes for Children's Learning before Compulsory School Age* (2000) with the programmes of study and focus statements in the Key Stage 1 national curriculum, to create a rich curriculum under seven Areas of Learning for children in the Foundation Phase. The Foundation Phase curriculum advocates that positive links between the home and the providers of care and education are fostered and promoted.

The Welsh Assembly Government's approach to education and lifelong learning is set in the broader context of our vision for children and young people overall.

We have seven core aims for children and young people developed from the United Nations Convention on the Rights of the Child. These will underpin all of the activities of the Department for Children, Education, Lifelong Learning and Skills (DCELLS).

We aim to ensure that all children and young people:

- have a flying start in life and the best possible basis for their future growth and development
- have access to a comprehensive range of education, training and learning opportunities, including acquisition of essential personal and social skills
- enjoy the best possible physical and mental, social and emotional health, including freedom from abuse, victimisation and exploitation
- have access to play, leisure, sporting and cultural activities
- are listened to, treated with respect, and are able to have their race and cultural identity recognised
- have a safe home and a community that supports physical and emotional wellbeing
- are not disadvantaged by any type of poverty.

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Introduction

Knowledge and Understanding of the World relates to children's everyday lives, their homes, families, other people, the local environment and community, and the wider world. Through different types of play, active, and experiential learning opportunities as well as practical activities, children will be provided with meaningful experiences. These will stimulate their senses as well as encourage them to ask questions, explore and wonder at their environment. They will undertake investigations that engage their interests, and develop awareness of the beliefs and views of others.

The spiral curriculum advocated by Jerome Bruner reflects a belief in children's learning as a process of revisiting and building on previous experiences, skills, knowledge and understanding as children develop. This model is particularly appropriate to children's learning and development between the ages of 3 and 7 years and supports the ethos of the Foundation Phase. Some topics or themes may be pursued by children across the age range at their own level; for example the cross-curricular theme of 'Where I live' could be undertaken by any age group and would involve different learning activities depending on prior knowledge.

Children will learn in the following ways:

- through the process of experiential learning, which:
 - is central to good practice in education for young children
 - starts with the children's present or past experience
 - encourages curiosity and exploratory play
 - provides an opportunity for children to recall and draw upon their experiences
 - requires children to question their learning experiences
 - enables children to explore and investigate their learning environments
 - enables children to communicate, interact and talk about what they want to do
 - enables children to feel they are valued
 - relates learning to themselves, their own lives and the real world
 - allows for new learning
 - allows practise of skills
 - allows opportunities to record their findings in a number of ways
 - incorporates opportunities to evaluate learning

- by imitating others, for example in role play and imaginative play
- by being taught specific skills directly, for example how to use specialist tools or measuring equipment.

Development of skills

The following skills are essential to this Area of Learning and can also be developed across the curriculum.

- Observing
- Comparing
- Classifying
- Enquiring
- Exploring and experimenting
- Listening
- Making decisions
- Predicting and testing
- Reflecting
- Describing
- Sorting and grouping
- Sequencing
- Asking/answering questions
- Investigating
- Thinking
- Solving problems
- Recording
- Communicating
- Evaluating



Places and people

To support the development of children's skills and knowledge of 'Places and people' the following are key areas and experiences that could be planned for.

- Starting with knowledge of their own home children might talk about where they live, make a model with construction equipment or draw their house, progressing to different types of transport, describing and recording their journey to school pictorially.
- A walk in the local area can be followed by sequencing the journey using photographs, expressing preferences for particular features of the environment and drawing a plan of the local area with symbols to represent particular features.
- Children should start with knowledge and understanding gained from visits in their locality when comparing and contrasting places such as the beach, town or country.
- Visits to contrasting places should allow children to develop their skills of enquiry, become competent in identifying and discussing geographical features, and have first-hand experiences of a range of different environments.
- Children could create small world scenarios or record their experiences by drawing, painting, model making or using appropriate computer software.
- Aerial photographs of the locality will help children to begin to understand how different places relate to each other and how to use relevant geographical terms to describe particular features.
- Programmable floor toys and remote-controlled equipment can be used to enable children to learn to follow directions and routes, as well as promoting skills at using technology.
- Building on earlier recording skills children should progress to producing their own maps, and using large-scale maps and plans.
- Through listening to stories, examining photographs, and asking and answering questions, children can learn about places that are further away, the people who live there, the types of food produced, the different types of travel and transport and how to use atlases and globes to locate places.

- Regular observations and discussions about the weather will enable children to appreciate the effects of the weather on daily life in different environments. As they progress children will be able to set up experiments and carry out investigations, for example to gather data about wind and rainfall and then represent the results graphically using ICT.
- Through observing the work people do, discovering the different types of transport used locally, and how buildings are used, children will begin to understand how a locality changes and the way in which people's actions lead to a change in the environment.
- As children develop knowledge about workplaces and roles of people in their locality, they will act out roles, be able to listen to visitors and question them about their roles, record what they find out, and progress to carrying out a survey enquiring about the occupations other children would like when they grow up.



This case study illustrates how talking about holidays provided the stimulus for an entirely child-led activity.

The airport

During the summer term we had been talking about where we were going on our holidays. This had given rise to talking about what we would need to take with us on holiday and discussions about appropriate clothes and other items that we might need to take depending on where we were going to.

The children made 'suitcases' using some small cardboard boxes from a recycling centre. They drew and cut out pictures and labels of the items of clothing, etc., that they would take with them on holiday. During discussions with the children we had also talked about passports. Practitioners had brought their passports in to show the children who then decided to make their own. The children went ahead to make little books with a picture of themselves and their date of birth, and other details. Some also stamped the blank pages with the ink pad and stamps available in class.

Then Anwen suggested that we all play a game using the items we had made. We talked as a class about where we would use passports and suitcases. The first suggestion was 'at a travel agent'. After talking some more the children realised that an airport might be a better place. So off the children went to find all the items they would need. There was no discussion about where to set up this airport – outside was best.



The children took out a table and the globe. They wanted paper and pens to write out tickets. The children then asked if they could take out chairs so that they could set up the aeroplane as well. Rebecca had the idea of numbering the chairs so that the passengers could be given a ticket corresponding to the number on the chair.

This activity was entirely child led. The ideas had been theirs from the very beginning. They found out a lot about different places around the world (although nobody queried why they all got on the same plane!), and had enjoyed writing the tickets and finding their numbered seats on the plane. The children had worked well together and, above all, they all had fun.



Time and people

To support the development of children's skills and knowledge of 'Time and people' the following are key areas and experiences that could be planned for.

- Children can learn to sequence events in their day by using evidence from photographs, and by recording their ideas in pictures and booklets. Through stories, songs and rhymes children's sequencing skills of the passing of time will be reinforced.
- Using photographs they take themselves (both indoors and outdoors) children can progress to sequencing events in the week and for longer periods. When appropriate, the events can be recorded using a time line. Children should become familiar with vocabulary that describes the passage of time, starting with events in their own lives.
- Photographs of earlier generations can provide a good stimulus for children to explore and ask questions about past times and events, as well as also engaging parents'/carers' interest in the curriculum. Photographs might also contribute to a class museum of old/new household items or toys that children can handle and compare, while at the same time learning relevant vocabulary to describe the characteristics that identify artefacts from different periods of time.
- Visitors might be asked to talk about their own childhood or school days with the children. This will enable children to develop their knowledge and understanding of ways of life in different times, to engage in two-way conversations as well as examine photographs and artefacts and listen to stories. This will help children to interpret evidence and understand why people did things, why events happened and some of the consequences.
- These visitors' accounts can be compared with books, DVDs, museum displays, and so on, to help children understand that there are different ways of interpreting the past.
- Stories can also help children to understand the concept of old and new, and the influence of past events and characters (for example characters from Welsh history).
- Visits to local museums and historic sites can help children to gain a greater understanding of the buildings and ways of life in Wales in past times.



This case study describes how a project that originally set out to look at the different types of houses that had been typical of a locality over the last fifty years was extended to include listening to music from the 1960s and looking at everyday household artefacts and 1960s fashion.

Life in the 1960s

During the 1960s a large housing estate was developed in our locality to replace the significant number of houses that had recently been demolished because of their poor condition. Our school was built in 1960 for the children of the families who moved to the new housing estate.

Our project originally set out to look at the different types of houses that had been typical of our locality over the last fifty years. We visited our local folk museum so that the children could see for themselves the different types of houses. We also walked around our estate to look at the different houses. During both these activities the children did observational drawings of the old and new houses.

The children enjoyed the visits and follow-up work so much that we decided to invite Mair to our school. In the 1960s Mair was one of the first children to come to our school. We found her name in the old register. She came with her mother to tell us about moving from her old house to her new one and what she could remember about being a pupil at the school. The children thought of questions to ask and we taped the interview for later use.

Mair left us a box of artefacts (that actually, we supplied) from her attic 'which she meant to throw out'. The children looked at them and were encouraged to think of reasons why they were being thrown out, and the reasons for throwing things out generally (see page 13). They wrote descriptions of the old houses and recounted what they had learned. By remembering and comparing knowledge gained, memory and recall were encouraged and critical thinking enhanced.

Why throw these out?



we don't need the oil
lamp because the
toilet is inside.



we don't need the
water jug because
there is a hot tap.



we don't need a
candle there is
electricity.

We decided to extend the scope of our project to what life was like during the 1960s. An historical dramatist visited the school as a character called Mrs Jones and told us more about living in the 1960s. The children took part in role-play activities. 'Mrs Jones' told us about music in the 1960s, so we bought a CD and learned how to 'twist' and to 'do the shake'.



'Mrs Jones' also told us about the clothes of the 1960s, and we went on the internet to see if we could discover any further information on fashions of that time. The children looked at psychedelic as well as black and white patterns before designing their own. Parents/carers brought in photographs from the 1960s, and practitioners who lived through the 1960s brought in some of their old toys, which we compared with new toys.

The project provided many opportunities to develop cross-curricular activities in the Knowledge and Understanding of the World Area of Learning. For example, the children used geographical language when making a pictorial map, and used mathematical skills when weighing and measuring ingredients to make a bread roll (when comparing sliced bread from a supermarket with 'real' bread).

The children really enjoyed this project – a new generation of 1960s music fans have been born.

Myself and other living things

To support the development of children's skills and knowledge of 'Myself and other living things', the following are key areas and experiences that could be planned for.

- Starting with themselves, action rhymes and songs will allow children to build their understanding and vocabulary for describing the main parts of their bodies.
- Children should learn about their features by observing their reflections in mirrors, making comparisons and talking about the visible similarities and differences between themselves and other children.
- As they progress children should observe and make comparisons between humans and other animals. They should discover that animals, including humans, move, need food and water, as well as grow and reproduce.
- Through experimenting in a range of structured activities children should learn to use their senses to discriminate between different sounds, tastes, smells and textures, as well as to recognise differences visually.
- Through using magnifiers and observing other living things such as minibeasts collected in the local environment, children should learn about other living creatures and sort and classify them according to their own or agreed criteria.
- As their skills develop children should be able to record the data from their investigations using tables, charts, graphs, pictorial representations and ICT as appropriate.
- Practical activities such as digging, planting, and looking after seeds and observing their growth, will lead to knowledge of parts of a plant as well as understanding that plants are living things that need water to grow.
- Children could explore a sensory area or display (a sensory garden might be set up outdoors for them to investigate). Outdoor learning should also provide children with knowledge of conservation and sustainability.

- Building on earlier experiences children should be able to carry out investigations and make predictions about the best conditions for growing seeds. As they become more sophisticated in their investigations children should be able to recognise the conditions for a fair test.
- Observations, investigations and topic work linked to growth should enable children to learn about the process of change in animals and plants over a period of time, as well as the effects of weather and the seasons.
- Opportunities should be available for children to select different recording systems.

This case study describes how children were provided with a wonderful opportunity to experience 'new life' at first hand when an incubator with 11 eggs ready to hatch was brought into school.

Living eggs

Day 1 – The eggs and incubator arrived at school. The children had been prepared in advance for their arrival following discussions, wall displays, stories and puzzles. During this time there was much discussion and prediction taking place: "They will grow and go tweet tweet."

Day 2 – The first day of 'pipping' created great excitement as the children watched, listened and waited. A practitioner remained close to the incubator throughout the waiting process as children constantly came and went. To the delight of both children and staff Chick 1 arrived at 11.05 a.m. By 1.50 p.m. another six eggs were 'pipping'. Word was passed around the school and a constant stream of children came in small groups to experience this event. By 3.10 p.m. Chick 2 and Chick 3 had hatched out, or as one child explained excitedly, "They pecked a hole with their beaks. They broke it."



Day 3 – Another seven eggs hatched overnight with the last remaining 'pipping' and hatching at 10.05 a.m. This was a 100 per cent success rate, which is above the norm of 70 per cent. The rest of the day was very busy with a variety of activities centred on the chicks including discussions, paintings, observational drawings, dressing up, stories and photograph taking.

Day 4 – The children watched as the fluffed-up chicks were transferred to the ‘brooder’. The children were involved in preparing the brooder, the feed and the water. They had a lot to say about the chicks: “They are so nice”, “They are very fluffy, small and cute”, “They will turn into a cockerel like their mum”.



Day 5 – This was the first opportunity the children had to handle the chicks. So that we would all remember the activity we took individual photographs of each child holding a chick (and later made the photographs into Easter cards).

This had been a wonderful five days. The experience had created much enthusiasm, interest and motivation among the children. The most reserved child had displayed excitement and pleasure while the most outgoing child had displayed sensitivity, calmness and a caring attitude towards living things. We hope to repeat the activity next year with ducklings.

Myself and non-living things

To support the development of children's skills and knowledge of 'Myself and non-living things' the following are key areas and experiences that could be planned for.

- In exploratory play and through problem solving children should discover the different properties of the natural materials sand, water, wood and clay.
- When engaged in creative play with malleable materials children should discover, by stretching, squashing, bending or twisting, that some materials can be moulded into different shapes.
- There should be many opportunities to explore and investigate the properties of materials from which everyday objects such as toys or clothing are made, and to acquire relevant vocabulary to describe them and begin to link the materials with their uses.
- In early investigational work children should obtain information by using their senses to explore natural and made materials. They should communicate their experiences and what they have learned about the properties of the materials, progressing to testing materials, recording observations and measurements accurately.
- Children will learn from first-hand experiences (such as cooking activities) to observe and describe the changes that occur in some everyday materials when heated or cooled, or when materials are mixed.
- In physical play with large- and small-wheeled toys, children experiment and begin to learn that a push or a pull can make something speed up, slow down or change direction. Children begin to use appropriate vocabulary that relates to forces.
- From an early age children learn to use switches to control electrical devices and they will need to be taught directly about the dangers of electricity.
- Children who are able to follow instructions and assemble electrical circuits will be particularly interested in doing it if this is linked, for example, with lighting up models, especially those that they have made themselves.
- By observing the effects of sunlight and investigating the effects of light using torches and lamps in darkened spaces, children will develop understanding of light, darkness and shadows, and will begin to predict about the possible effects of different conditions.

- Games and experiments with sound will enable children to begin to understand how sound travels. They will enjoy creating their own 'telephones' with recycled materials, making decisions and solving problems together.
- Children of all ages can experiment at an appropriate level with sound-making objects or equipment, recording their discoveries in an appropriate form.
- Children should be encouraged to use a variety of different information sources (such as books and information technology) to increase their knowledge and understanding of the world around them.



This case study illustrates how a simple outdoor game provided the stimulus for some cooking activities, which in turn provided opportunities for children to explore and investigate the properties of materials in a fun way.

Pasta and pizza

We had noticed that many of the children enjoyed activities involving making food in the cooking area, which they then served in the 'café' we had created. We were surprised when this activity spilled out into an outdoor area activity: one of the children delivered an imaginary pizza while riding a bicycle. During circle time later that day we asked the children about their favourite foods. We discovered that all of them liked either pizza or pasta, or in some cases both, and so we decided that we would make our own.

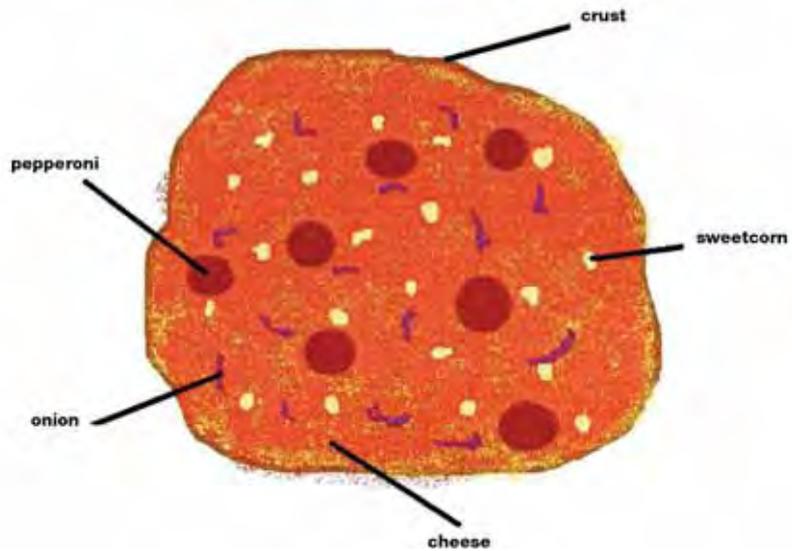
Before the children arrived the following morning we set up two large tables – one for making pasta and one for making pizza. On the pasta-making table we placed a borrowed pasta maker, flour, oil, tomatoes for the pasta sauce and an assortment of mixing bowls and boards. On the pizza-making table we placed similar items together with some cheese and a selection of healthy foods that could be used as toppings.

When the children arrived we explained to them that there would be two groups – one group would make pasta and the other group would make pizza. The children then chose which group they wanted to be in. Very soon the children were all involved in weighing, measuring and mixing activities as they made their pasta and pizza bases. All the children were enjoying the activity and excitedly anticipating the next stage.

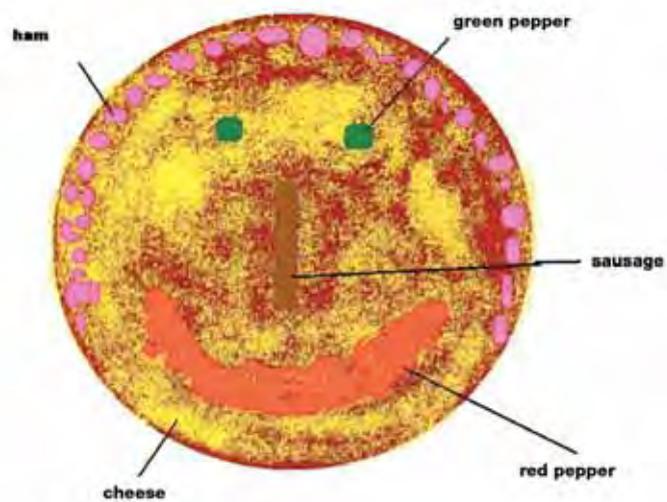


The children making pasta had been very surprised that they would be making pasta from scratch as none of them realised that pasta could be made – they thought it came in a bag from the supermarket! They were all very keen to use the pasta-maker and enjoyed watching the pasta getting bigger and thinner each time it was rolled out.

The children making pizza were particularly eager to choose the toppings for their pizzas.



Some of the children wanted to make faces on their pizzas and went off to the computer to design their pizzas.



After a busy morning of cooking all of us enjoyed eating our pasta and pizza at snack time. One of the practitioners chatted with the children and made them aware that as a child herself pizza and pasta were not commonly eaten in Wales even though the ingredients were readily available. The children thought they were very lucky to have pizza and pasta in their diet.

Planning

A theme or topic provides children with a context and helps them to develop understanding through meaningful interrelated experiences which they can talk about and relate to their previous knowledge and understanding. A topic such as the weather is one that all children can identify with and provides plenty of scope for first-hand observations, learning new vocabulary and talking about experiences. Making cards/objects for special occasions enables children to become aware of the uses of a range of materials.

Medium-term planning

The extract below taken from a medium-term plan illustrates the possible learning outcomes that arise when well-planned opportunities and activities are appropriately and imaginatively resourced.

Planned opportunities and activities	Resources	Possible learning outcomes
Growing a range of plants in window boxes. Reading about 'seasons' and 'growing'. Joining in songs and rhymes about summer, what we wear and can do when it is hot. Walks in the community and our garden to observe the seasons.	Cress, carrot tops and bedding plants Books, leaflets, pamphlets Music CDs and tapes Magnifying glass, weather chart that uses weather symbols	Children are able to observe the weather and take an interest in how it affects what is happening during the summer season.
Punching holes in card, exploring any tools in the art area that can be used to join materials. Dissolving and mixing substances. Exploring mark-making.	Sticky tape dispenser, split pins, paperclips, staples Jugs, cups, beakers, flour, rice, paints, inks Crayons, pencils	Children are able to explore materials and begin to recognise their purpose and use.

Fortnightly planning for Knowledge and Understanding of the World

Time and people

Using information from the story of Betsi Cadwaladr from the *Welsh History Stories** series as a stimulus, introduce the children to the work of a nurse many years ago. As a follow-up activity, talk to the children about the role of the nurse today and arrange for a dental nurse to visit the school (to talk about the importance of dental hygiene, how to brush your teeth properly and about which foods are good/bad for your teeth).

Myself and other living things

Using a range of resources including books, atlases, photographs and ICT packages observe the differences between different animals (for example animals with no teeth, sharp teeth, with teeth outside their mouths, animals with/without tails, with two/four legs, with arms and legs/wings and legs).

Places and people

Investigate the homelands of different animals and how these places are similar to/different from places in Wales.

Myself and non-living things

Have fun making 'ice-hands' by filling rubber gloves with water, water and fruit juice, and water and paint, letting them freeze and then comparing their consistency when frozen and timing how long it takes each type of 'ice-hand' to melt.

* See 'Useful information and contacts' section.

Progress in learning

Provision for children's Knowledge and Understanding of the World should be planned as an integrated whole, and take account of, and build upon, skills, knowledge and understanding developed in other Areas of Learning. As well as planning for this Area of Learning across the curriculum there should also be planned activities on the development of specific skills. Children will progress along the learning continuum when they are developmentally ready. Children should be encouraged to be curious and find out by:

- exploring and experimenting
- thinking about questions and then asking them and listening to the answers
- listening to others' ideas
- identifying what they want to find out and how to do it
- thinking about what might happen if...
- becoming aware of human achievements and the 'big ideas' that have shaped the world
- investigating sources and issues
- thinking about how they will know if something has worked
- making observations and measurements and keeping records
- making comparisons and identifying similarities and differences
- sorting and grouping information using ICT on some occasions
- seeing links between cause and effect
- making links within the different elements of Knowledge and Understanding of the World
- thinking creatively and imaginatively
- communicating observations and measurements
- recognising simple patterns in their findings
- describing what they have found out and offering simple explanations
- expressing their own opinions and feelings, and making decisions while considering the viewpoints of others
- using and becoming familiar with common words and phrases for their world
- reflecting on and evaluating their own and others' work.

Places and people

Children should be given opportunities to:

- learn about where their locality is
- learn about distance and how to follow directions and routes
- use and make simple maps, to find where places are and how places relate to other places
- identify natural features, *e.g. rivers, hills, beaches*, and the human features, *e.g. buildings, roads, bridges*, of their own locality
- begin to recognise differences between their own locality, localities in other parts of Wales and in different parts of the world
- learn about how and why people and places are linked, *e.g. where they work and where they go on holiday, where family and friends live*
- use atlases and globes
- investigate how places change, *e.g. the weather, the seasons, buildings, people's jobs*
- recognise how people's actions can improve or damage the environment.

Time and people

Children should be given opportunities to:

- sequence events, routines and changes, *e.g. in a journey to school, in a story*
- measure time, using simple measuring devices, clocks, watches and calendars
- recognise the changes caused by time, *e.g. to themselves and to people and places familiar to them*
- recognise that there are reasons for, and consequences of, some actions
- begin to identify differences between ways of life at different times, *e.g. by comparing a familiar place at different times in the past*
- use a range of historical sources, including artefacts and buildings, adults recalling their own past, and visual sources
- look at different representations and interpretations of the past, *e.g. different books/pictures/ICT sources about the same person or event.*

Myself and other living things

Children should be given opportunities to:

- learn the names and uses of the main external parts of the human body and plants
- observe differences between animals and plants, different animals, and different plants in order to group them
- identify the similarities and differences between themselves and other children
- learn about the senses that humans and other animals have and use to enable them to be aware of the world around them
- identify some animals and plants that live in the outdoor environment
- identify the effects the different seasons have on some animals and plants.

Myself and non-living things

Children should be given opportunities to:

- experiment with different everyday objects and use their senses to sort them into groups according to simple features
- experiment with different everyday materials and use their senses to sort them into groups according to simple properties
- develop an awareness of, and be able to distinguish between, made and natural materials
- understand how some everyday materials change in shape when stretched, squashed, bent and twisted, and when heated or cooled
- understand that light comes from a variety of sources, such as the Sun, and that darkness is the absence of light
- understand that there are many kinds and sources of sound, that sounds travel away from sources and that they are heard when they enter the ear.

Knowledge and Understanding of the World across the curriculum

Effective provision for Knowledge and Understanding of the World needs careful planning across all Areas of Learning to ensure that children have opportunities to develop, apply and extend their skills of observation, enquiry, investigation, communication and decision making through a variety of media. There are many opportunities to develop skills, knowledge and understanding within the other Areas of Learning and within the different teaching areas in the setting/school. For example:

Personal and Social Development, Well-Being and Cultural Diversity

- initially discussing and investigating different types of food from a variety of cultures and identifying those that are healthy, progressing to recording their findings in different ways
- understanding that there are different ways of showing the same people/events

Language, Literacy and Communication Skills

- looking at and referring to books and ICT sources to find information about animals, the environment and famous people of the present and past, initially locating and discussing their findings, progressing to being able to transfer and use the information to extend their learning
- through initially listening to and asking questions of people/visitors with different roles in the community, progressing to writing descriptions about the work that these people do and how important they are to our communities today

Mathematical Development

- using the immediate outdoor environment and the local environment to provide opportunities to observe patterns (and repeating patterns) – initially recording simple patterns, progressing to more detailed/intricate patterns
- devising plans and maps of the setting/school environment and the local environment to reinforce the development of the mathematical language of position

Welsh Language Development

- developing Welsh vocabulary of features of the setting/school environment. While undertaking a study of the local environment, attention should be drawn to bilingual road signs as well as Welsh or bilingual house, street or place names
- experiencing traditions and celebrations in the local community and across Wales

Physical Development

- using magnifying glasses and a simple microscope to observe plants and insects then recording these by using a variety of media; the diagrams and drawings should become more sophisticated as the children's fine manipulative skills develop
- record their own physical development and change over time

Creative Development

- using different musical instruments (handmade and commercial) children can devise and represent sounds heard in the indoor and outdoor learning environments
- through designing historical costume, acting out roles in a story.



Useful information and contacts

Clamp and Pip: Carnival of the Creatures by A O Richards
(Awen, 2007) ISBN: 9781905699032

Cyfres Dros yr Enfys: Beth sydd ar Goll?/What's Missing? by G S Jones
(Atebol, 2006) ISBN: 9781905255375

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- supports the learning of the children
- is relevant to the work being explored
- is appropriate for the children.

Cadw is a Welsh Assembly Government body with the mission to protect, conserve, and to promote the built heritage of the country. Most of the country's great castles, abbeys and other monuments are now in Cadw's care. They number more than a hundred and are spread over the length and breadth of Wales.

www.cadw.wales.gov.uk

Learning through Landscapes helps settings/schools and early years settings make the most of their outdoor spaces for play and learning.

www.ltl.org.uk

Early Childhood Research and Practice (ECRP) is an electronic journal covering topics related to the development, care, and education of children from birth to age 8.

www.ecrp.uiuc.edu

The Early Childhood and Parenting (ECAP) Collaborative website is home to more than a dozen projects that focus on educating and raising young children. ECAP hosts research, technical assistance, and service projects, and its experienced writers and editors respond to content-specific questions, preparing publications as well as providing training and presentations.

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Techniquist is an educational charity and the UK's leading Science Centre, with its main base in Cardiff Bay and hubs in Llanberis and Wrexham. It offers science kits, workshops and its portable Planetarium directly to the majority of schools in Wales. The website contains useful resources, online activities and games, as well as further information on its school outreach services.

www.techniquist.org

Foundation Phase glossary

Active learning

This term relates to children being active and involved in their learning. Children learn best through first-hand experiences. It is crucial that children have active experiences indoors and outdoors that build up the skills, knowledge and understanding that will support their future learning.

The purpose of play/active learning is that it motivates, stimulates and supports children in their development of skills, concepts, language acquisition/communication skills and concentration. It also provides opportunities for children to develop positive attitudes and to demonstrate awareness/use of recent learning, skills and competencies, and to consolidate learning.

Assessment profile

The assessment profile provides guidance on key child developmental stages and skills that children develop and acquire from approximately 18 months through to 84 months.

Child initiated/centred

The Foundation Phase curriculum should focus more on children's interests, development and learning rather than the curriculum and pre-determined outcomes. It is important to note that the planned curriculum has to have structure and clear learning objectives but enough flexibility to enable the children to follow their interests and their needs.

Careful observations of the planned curriculum and how children respond to it should provide evidence of whether the children are focused on their learning and not playing aimlessly. An understanding of child development is crucial to ensure that the children are extended in their learning.

Cognitive development

Cognitive development is the development of the mind. It focuses on children's thinking and understanding, imagination and creativity (including problem solving/reasoning/concentration and memory).

Communication/language development

Language is made up of different forms and skills which include speaking and listening, reading, writing, thinking and observation. The tone of a voice is a powerful form of communicating meaning. Some children may use alternate systems to the voice such as signing.

Non-verbal communication also takes on different forms such as facial expressions (smiling), gestures/body movements (shoulders slouching and eye contact).

Cooperative/group play

Children start to play together, they share their play. Children become more sociable, take on roles in the play and take account of the roles of other children. They begin to be aware of the needs and wishes of their peers, so that gradually the play becomes more complex. Rules are sometime devised and some cooperative play will be revisited over several days.

Cultural diversity

The Foundation Phase supports the cultural identity of all children, celebrates different cultures and helps children recognise and gain positive awareness of their own and other cultures. Positive attitudes should be developed to enable children to become increasingly aware of and appreciative of the value of the diversity of cultures and languages that exist in Wales.

Curriculum

Seven Areas of Learning have been identified to describe an appropriate curriculum for 3 to 7-year-olds that supports the development of children and their skills. They complement each other and work together to provide a curriculum that is holistic. Each Area of Learning includes the statutory education content (skills and range) that needs to be followed.

Curriculum Cymreig

The Foundation Phase contributes to the Curriculum Cymreig by developing children's understanding of the cultural identity unique to Wales across all Areas of Learning through an integrated approach. Children should appreciate the different languages, images, objects, sounds and tastes that are integral to Wales today, and gain a sense of belonging to Wales, and understand the Welsh heritage, literature and arts as well as the language.

Differentiation

The curriculum should be flexible to match children's abilities, skills and developmental needs.

Emotional well-being

Emotional development focuses on the development of children's self-esteem, their feelings and their awareness of the feelings of others.

Fine manipulative skills

The development of children's fine manipulation/motor skills begins within the centre of their bodies and moves out. Through appropriate development, children will eventually be able to undertake fine and intricate movements. Fine manipulation skills include using finger movements and hand-eye coordination.

Gross motor skills

The development of gross motor skills starts with the young baby controlling head movements and then, moving down the body, controlling other parts of the body. Gross motor development includes using whole body movements, coordination and balance.

Holistic curriculum

The holistic curriculum is one where Areas of Learning are interlinked and learning and teaching support many aspects of the children's development rather than focusing on one specific stage or need. The curriculum is viewed and delivered as a whole.

Imagination

Imagination is having the skills and ability to form images, ideas and concepts that either exist but are not present, or that do not exist at all.

Independence

Independence refers to having the ability and skill to be less dependent on others. Skills of managing and coping should be progressively developed throughout the Foundation Phase.

Learning styles

There are different learning styles or preferred ways of interacting. The learning styles are: visual, auditory and kinaesthetic. When learning styles are taken into account learning can be enhanced.

Some children learn best if they have a visual stimulus, others an auditory one or a kinaesthetic (practical) task. Research into brain development has shown that individual learning styles are affected by the environment, the type of learning activity and whether the child is working independently or in a group.

Memory

The memory is the part of the brain where information is collected, saved and later retrieved. Initially information has to be taken in and understood; it is then saved and recalled when needed. All of these processes are needed for learning to take place.

Outcomes

The Foundation Phase Outcomes incorporate baseline assessment scales and descriptions and the national curriculum level descriptions. They have been developed to support the end of phase statutory teacher assessment. There are six Outcomes per Area of Learning and for information purposes Outcomes 4–6 broadly cross-reference to the current descriptions for Levels 1–3.

Outdoor learning

There is a strong emphasis on outdoor learning in the Foundation Phase. The outdoor learning environment should be an extension of the indoor learning environment. Structured experiential activities should be planned for throughout the day, and children should as far as possible (taking account of health and safety issues) be able to move freely between the indoors and outdoors.

Parallel play

Children may appear to be playing together, but closer observation reveals the children are actually playing alone and not interacting with each other. Children can be using the same equipment, or sitting or standing next to each other, but both are working independently of each other, with no interaction (either positive or negative) between them in their play.

Partnership/associative play

Children operating in the partnership/associative stage of play will begin to become aware of other children. They start to communicate with each other and are more aware of the play/games that other children are involved in. They begin to explain to each other what they are doing. Gradually one child will become involved in the other child's play.

Pedagogy

Pedagogy refers to the relationships between learning and teaching. It embraces the concept of the practitioner as a facilitator of learning, responding to the needs of individuals, willing to learn alongside the children, using appropriate methods to manage the process of learning and continually reflecting on and improving practice.

Personal development

Personal development focuses on the children's awareness of themselves and the development of their self-help skills.

Physical development

Physical development focuses on increasing the skills and performance of the body. Physical and cognitive development are closely linked, especially during the early years. Physical development can be divided into gross motor skills and fine manipulative skills.

Practitioners

This generic term refers to the adults that work with children in the Foundation Phase. It includes teachers and classroom assistants in the maintained sector, and staff that work in the funded education settings in the non-maintained sector.

Practitioner/adult guided

Practitioners need to plan an appropriate curriculum that engages children in their learning. They need to encourage, motivate and develop attitudes. Practitioners need to be aware of when it is appropriate to intervene sensitively to extend children's learning, when to challenge their problem-solving and thinking skills, and when to allow the children to come to satisfactory conclusions on their own. Practitioners should support/'scaffold' children's learning, observing, monitoring and assessing children's progress to ensure that they are moving on to the next stages of their development and that their skills are being extended.

Problem solving

Problem solving focuses on developing the ability to assess a problem/situation then gathering information to find a solution/answer. As children's skills increase they will be able to draw on previous experiences when attempting new activities and solving problems.

Self-esteem

This refers to the way children feel about themselves. Positive feelings indicate a high self-esteem, while negative feelings about themselves are an indication of low self-esteem.

Skills framework

The non-statutory *Skills framework for 3 to 19-year-olds in Wales* outlines progression in developing thinking, communication, number and information and communication technology (ICT).

Social development

Social development focuses on children's social interactions and relationships with their peers, practitioners and adults.

Solitary play

Children play contentedly alone. They are involved in their own play and will move from activity to activity regardless of any other children. Often in this stage of play children enjoy imitating everyday activities.

Spectator play

Children observe other children but do not join in. They like to watch other children playing. Often they can be observed standing/sitting on the fringes of where other children are playing. Although they can appear to be alone or lacking in confidence, they can often be concentrating while observing the play in order to develop an understanding of what to do.

Statutory assessment

Within the Foundation Phase there are two statutory assessments that have to be implemented: the baseline assessment and the end of phase statutory teacher assessment.

Structured educational play

Structured play experiences have specific planned outcomes to extend children's learning, skills and development. Structured play should be planned with flexibility so as to allow children opportunities to choose and extend an activity according to their interests and knowledge.

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