Estyn

*Rhagoriaeth i bawb ~ Excellence for all*

Arolygiaeth Ei Mawrhydi dros Addysg
a Hyfforddiant yng Nghymru

Her Majesty's Inspectorate
for Education and Training in Wales

# Supplementary guidance for schools on inspecting skills

# September 2010

The purpose of Estyn is to inspect quality and standards in education and training in Wales. Estyn is responsible for inspecting:

- ⅄ nursery schools and settings that are maintained by, or receive funding from, local authorities;
- ⅄ primary schools;
- ⅄ secondary schools;
- ⅄ special schools;
- ⅄ pupil referral units;
- ⅄ independent schools;
- ⅄ further education;
- ⅄ adult community learning;
- ⅄ youth and community work training;
- ⅄ local authority education services for children and young people;
- ⅄ teacher education and training;
- ⅄ work-based learning;
- ⅄ careers companies;
- ⅄ offender learning; and
- ⅄ Department for Work and Pensions contracted employment provision in Wales

Estyn also:

- ⅄ provides advice on quality and standards in education and training in Wales to the National Assembly for Wales and others; and
- ⅄ makes public good practice based on inspection evidence.

**What is the purpose?**

To provide guidance to inspectors for evaluating skills.

**For whom is it intended?**

All school inspectors

**From when should the guidance be used?**

From September 2010

**Date of publication:  May 2010**

# 1  Introduction

The key tasks for inspectors are to judge whether all pupils have the communication, numeracy and ICT skills needed to **access** the whole curriculum and how well the wider curriculum itself develops pupils' skills.  The following guidance is intended to support inspectors in making these judgements.

You should give most weight to **communication** skills in the Inspection Framework aspect 1.1.4, as these skills underpin all elements of pupils' learning.  You should focus in particular on the literacy skills of **reading and writing**, where appropriate. Communication skills must therefore be a line of enquiry in every inspection.

You should **report** on pupils' communication skills in every inspection, and where appropriate, you should also report on any outcomes in indicators that are associated with these skills.  Inspectors should report on outcomes in **essential skills qualifications** in secondary schools.

You should **report** on pupils' number and ICT skills where they are particularly good or where are underdeveloped and have a detrimental effect on pupils' progress in subjects across the curriculum.  You may also report on any outcomes in indicators that are associated with these skills, where appropriate.

You should be aware that skills development is a cyclical rather than linear process. In particular, you should recognise how the use of skills may be linked to the complexity and demands of the learning activity. This means that you should be aware that younger pupils may demonstrate more complex skills at a simple level and equally, older pupils may demonstrate skills at a more basic level because of the level of demand of the learning task.

You should use the guidance contained in the annexes to help you judge whether pupils have the communication, numeracy and ICT skills needed to access the whole curriculum. This information will also help you evaluate how well the wider curriculum contributes to the development of pupils' skills.  You should note that the information

in the annexes is **not** definitive or exhaustive. In addition, the examples given in many subjects and areas of learning may apply to a range of work in others.

Annex 1 provides information to help you make judgements about how well children access areas of learning and how well the wider curriculum itself develops children's skills.

Normally, it may be helpful for the same inspector to take responsibility for skills in Key Questions 1 and 2.

## 2  Evaluating skills

### Evaluating 1.1.4 skills

**Progression** in developing skills can be seen in terms of gradual refinement of these skills and the extent to which pupils can apply them across all aspects of their learning, and in a range of situations in their everyday lives.  Pupils' progress can also be seen in the way they move from needing support in using these skills to using their skills effectively on their own.

You should be aware that skills development is a cyclical rather than linear process.  In particular, you should recognise how the use of skills may be linked to the complexity and demands of the learning activity.  This means that you should be aware that younger pupils may demonstrate more complex skills at a simple level and equally, older pupils may demonstrate skills at a more basic level because of the level of demand of the learning task.

You should consider the confidence pupils show in using their skills, for example, their readiness to develop and to use the skills they have acquired in different, new or unfamiliar situations, and how well they can apply their skills without support.

In **bilingual and Welsh-medium** schools, in particular, you should be alert to pupils' inaccurate use of language.

You should take account of information on the **starting points of pupils**, for example, the outcomes of baseline assessments, assessments from previous schools and initial screening tests.  In the Welsh-medium sector, the formal teaching of skills in English does not start until the beginning of key stage 2, whatever the linguistic background of the learners.  In most cases, schools will have this information readily available as it informs teachers' planning and their day-to-day work with pupils.

Taking account pupils' starting points; you should establish how well pupils **attain** in Welsh or English, mathematics and ICT in end of key stage teacher assessments, examinations and key skills qualifications, where appropriate.  This information will enable you to establish the skills that pupils have already acquired in these subjects.  In inspecting skills, the essential judgement is whether pupils can **transfer and apply** these skills to **enable** them to access learning across all areas of the curriculum.

You should consider carefully the outcomes of a range of **assessments** and **performance data**, for example, standardised reading and numeracy tests.  This information will help you to judge pupils' achievements and check if they are making reasonable progress over time.  Where schools have established school, cohort and individual **targets** for pupils, you may consider the progress pupils are making towards achieving these targets.

You will need to undertake **observations** of pupils using their skills across a range of subjects or areas of learning.  In these sessions, you should be aware of how well pupils listen to others, ask questions and respond to ideas and information and, in particular, how well they cope with the demands of tasks, such as reading and writing

activities.  During **discussions with pupils**, you should find out how well they are developing their skills and if they know what they must do to improve.  You should make certain that you include a sample of pupils who receive specific support for improving their skills.

You should be particularly alert to situations where pupils' **access** to the curriculum is affected by their reading and writing skills and where these skills are a barrier to their progress in learning across the curriculum.  You will need to identify the possible causes for this, including:

- pupils' lack of skills in Welsh or English; and/or

- pupils' inability to transfer skills to a new context (their lack of ability to apply their Welsh or English knowledge and skills).

You should use the information in Annex 1 to help you make judgements about how well pupils apply their communication skills in subjects and areas of learning across the curriculum.

You should examine samples of pupils**' work** across the curriculum or areas of learning, including course folders and files where appropriate, to judge how well pupils apply their skills.  For example, you should be alert to work that indicates that pupils are over-reliant on support, such as writing frameworks and worksheets or spend time copying information without benefit to the development of their independent writing skills.

In addition, to developing their communication skills in Welsh and English, learners in the Welsh medium sector, in particular, should develop increasing competence in using dual literacy skills.  For example, pupils often have to gather information from sources in one language and use it in the other, either orally or in writing.  These skills are important in that they enable pupils to access a wider range of learning materials and reinforce their communication skills in Welsh and English.

You should be aware of particular groups of pupils, for example, pupils who are of average ability or below and who not do receive support for additional learning needs.  Pupils who receive specific **support** to develop their skills may be a particular focus for you.  These pupils' progress may be examined to judge how well they are doing.  Observations of support sessions, such as 'catch-up literacy and numeracy programmes', will provide valuable evidence of how well pupils make progress in targeted support sessions.  Observations of these pupils in class will provide evidence of how well they achieve in day-to-day learning tasks and activities.

You should note that judgements about 1.1.4 skills (outcomes) should inform your judgements about 2.1.2 provision for skills and 3.1.Leadership.

### Evaluating 2.1.2 provision for skills

In judging the quality of provision, you may take into account the impact of strategies, policies or working arrangements, which aim to ensure that pupils develop skills systematically, over time and in a broad range of contexts.  You should expect schools to do everything possible to help pupils achieve good levels of skills.

You may scrutinise a sample of the school's planning, including **schemes of work and lesson plans**, to judge how well staff have embedded skills into the experience of pupils across all subjects, areas of learning or learning pathway.  You may consider how well staff exploit opportunities for developing these skills in their lessons.  You may consider the links that exist between subject schemes of work.  You may determine if there is continuity in pupils' learning so that the skills they gain in Welsh or English, mathematics and ICT lessons are reinforced and enhanced further in their subject studies or areas of learning.  You should judge how well the wider curriculum itself develops pupils' skills.

You may consider if the **curriculum** has appropriate learning activities, which:

- meet pupils' needs in gaining and using skills;

- equip pupils with the skills they can use in a range of situations and across all aspects of their learning; and

- make sure pupils' development of skills takes place in Welsh or English, and in both languages, where appropriate.

In particular, when observing sessions other than Welsh or English, you may consider if the **teaching**:

- demonstrates good use of language, which influences the development of pupils' reading and writing skills;

- provides opportunities for discussion, uses probing questions to improve pupils' understanding and helps them to elaborate on their answers and make learning connections;

- develops pupils' reading skills, such as when pupils are required to use their comprehension and information retrieval skills to gain and synthesise information from text, tables, charts and graphs etc; and

- where appropriate, includes direct teaching of reading and writing skills, such as developing pupils' proof-reading and redrafting skills, aiding the spelling of subject specific terminology and using approaches, such as scaffolding or modelling, to support the development of writing skills.  Pupils should also be given specific guidance on how to develop and apply dual literacy skills.  You should be alert to approaches which inhibit the development of pupils' writing skills.

You should be particularly alert to situations where pupils' **access** to the curriculum is affected by their lack of appropriate reading and writing skills and where this is acting as a barrier to their progress in learning across the curriculum.  You will need to identify the possible causes for this, including:

- teaching that does not make use of suitable opportunities to use and develop reading and writing skills  across the curriculum (a teaching and/ or planning issue); or

- the reading and writing skills that pupils need to fulfil tasks have not yet been taught (a planning and provision issue).

You should consider the coherence and consistency of the approach to developing pupils' skills across the school. You may judge how well **marking and assessment** help pupils to develop their skills and to reflect on their work and make progress.

You may consider how well the school **identifies** the need for support for skills as early as possible, as well as the **tracking** of pupils' progress. This work will include the **tracking of progress** of individual pupils as well as tracking progress of groups of pupils at year group, key stage and whole school levels, and the setting of **targets for improvement**.

Where pupils do not have secure or good enough skills, or are falling behind, you should expect schools to have support in place to help these pupils improve their skills, such as provision for basic skills.

You should consider any arrangements for the **support** of pupils' skills through, for example, the provision of in-class support or separate support sessions or classes. You may examine how schools use ongoing assessment to provide work that is well-matched to pupils' needs. Assessment information should also inform the way that pupils remain in support programmes or no longer need intervention work.

You may take account of how well schools adapt **programmes of study** when pupils are working significantly below expected levels of skills. You should expect schools to provide more-able and talented pupils with work at significantly higher levels in response to a greater degree of challenge. Learning activities should extend the breadth and depth of these pupils' studies as well as provide opportunities for independent learning.

You may examine how information about pupils' skills is shared between staff. This could include how pupils' progress on intervention programmes is shared with class teachers. You may consider how this information influences the teaching and learning strategies used by staff.

You may consider the appropriateness of the **learning environment** for developing pupils' skills and the impact that it may have on the successful development of these. This may include how well the environment of the classroom celebrates and promotes skills, such as in the display of specific-subject vocabulary and model responses for writing tasks. You may consider the contribution of the library to the development of pupils' communication skills.

Judgements about 1.1.4 skills should inform your judgement about 2.1.2 provision for skills.

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**Evaluating Key Question 3: How good are leadership and management?**

You may hold **discussions with leaders and managers**, including governors, to consider how well they lead in initiating and supporting effective skills strategies and policies across the range of the school's work. The inspection work undertaken to answer 1.1.4 and 2.1.2 should provide evidence of the success of these policies and strategies. This information will also help in evaluating how well leaders and

managers have embedded policies and strategies in the work of the school and how much difference they are making to pupils' progress and development. This information may include the school's work to gain the Basic Skills Quality Standard, support for pupils with basic skills needs, and how well underachieving pupils catch up with their peers.

You may consider how well leaders and managers focus on raising standards and if they know how well pupils are progressing, including those receiving targeted support or extension.

Through **discussions with staff**, you may consider how well staff work as a team in supporting the development of pupils skills, particularly reading and writing skills, where appropriate. This will include how effectively staff undertake roles and responsibilities in this area of work, including, where appropriate, whether the school has appointed a member of staff to lead skills developments, and how well this work is co-ordinated and managed. For example, have links been made between subjects in writing for different purposes and audiences? Does the school use a common vocabulary and marking policy? Do staff consider the readability of texts, where applicable?

You may consider how schools have audited the development of pupils' skills across the curriculum to ensure that subjects identify and provide opportunities for pupils to develop their skills. You should also consider how far teachers have agreed common approaches to the development of pupils' skills.

You may scrutinise the school's **strategic and operational plans** and other documentation, which relate to the development of pupils' skills. These include any relevant action plans and evaluations of progress and trends in taking this area of provision forward.

You may consider how well the school has included the monitoring and evaluation of pupils' levels of skills, and their successful development by staff, within its **monitoring** and **planning for improvement** policies and procedures.

You may consider the **professional training** staff undertake to develop pupils' skills and how this translates into effective whole-school practice. For example, displaying key assessment criteria in classrooms and sharing work among staff to evaluate the marking of pupils' written skills in subjects and areas of learning.

## Annex 1

**Using communication skills across the Foundation Phase curriculum for children aged 3 to 7-years-of-age**

You should use the following information to help you make judgements about how well children **access** areas of learning and how well the wider curriculum itself develops children's skills.

You need to ascertain how well children progress from needing support to becoming both independent and interdependent learners who can use their communication skills effectively

You may consider if the teaching and provision for **Personal and Social Development, Well-being and Cultural Diversity** enables children to:

- listen to others, ask questions and respond to ideas and information;

- talk about their views, feeling and emotions and the choices they make;

- share and, where appropriate, read stories to raise questions and evaluate the decisions made by characters;

- develop knowledge of the different languages that exist in Wales; and

- express their views in writing, where appropriate.

You may consider if the teaching and provision for **Language, literacy and communication skills** enables children to:

- listen to others and respond appropriately;

- talk about matters of immediate interest and progress to speaking with confidence using the conventions of discussion and conversation;

- join in with rhymes, songs and stories;

- follow stories read to them and respond as appropriate, progressing to reading a range of fiction and non-fiction materials, including ICT-based resources, showing an understanding of the main ideas or events and information; and

- progress from mark-making to writing independently for a variety of purposes, plan and review their writing, spell common words correctly, use simple punctuation and sentence structure correctly and develop a legible style of handwriting.

You may consider if the teaching and provision for **Mathematical Development** enables children to:

- listen, ask and respond to mathematical questions;

- understand and use mathematical language to discuss their work and explain their methods of reasoning;

- represent their work in writing, where appropriate, in a clear and organised way; and

- present their work in a variety of forms, including words.

You may consider if the teaching and provision for **Welsh Language Development** enables children to:

- listen to and show understanding of basic instructions;

- use simple words, greetings and expressions with increasingly correct pronunciation and appropriate intonation;

- join in with rhymes, songs and stories;

- look at, share and show an interest in books, progressing to reading simple texts independently, showing an understanding of the main ideas or events; and

- progress from mark-making to writing independently for a variety of purposes, spell common words correctly and use simple punctuation and sentence structure correctly.

You may consider if the teaching and provision for **Knowledge and Understanding of the World** enables children to:

- ask questions, listen to the answers and others' ideas;

- describe what they have found out and offer simple explanations;

- use and become familiar with common words and phrases for their world;

- use different sources to find information, such as books, pictures and ICT sources; and

- progress from mark-making to writing independently, such as keeping records of their observations, spell simple words correctly and use simple punctuation and sentence structure correctly.

You may consider if the teaching and provision for **Creative Development** enables children to:

- listen, talk and discuss the work of others;

- use descriptive vocabulary to respond to pictures, words and a range of different stimuli; and

- record, pictorially at first and progressively in writing, their work and that of others in art and music.

You may consider if the teaching and provision for **Physical Development** enables children to:

- listen and respond to instructions;

- use a growing vocabulary to convey meaning; and

- devise games and rules using pictorial and written forms, where appropriate.

You may consider if the teaching and provision for **Religious Education** enables children to:

- listen and respond to others, asking questions about themselves, their families, other people and the wonders of the world;

- express their own feelings and opinions and speak with increasing confidence to peers and others;

- progress from looking at texts with/without an adult to reading independently, expressing opinions about major events or ideas and using simple information devices and clues to deduce meaning; and

- progress from mark-making to writing independently, spell simple words correctly and use simple punctuation and sentence structure correctly.

**Using the skill of communication across the curriculum for pupils aged 7 to 19 years-of-age**

You should use the following information to help you make judgements about how well pupils **access** the whole curriculum and how well the wider curriculum itself develops pupils' skills.

You need to ascertain how well pupils progress from needing support to becoming both independent and interdependent learners who can use their communication skills effectively.

You may consider if the teaching and provision for **Welsh or English and Modern Foreign Languages,** where applicable, enables pupils to:

- communicate their ideas and information in a variety of forms and media as listeners, viewers and speakers and for a range of purposes, including taking account of the needs of their audience;

- read accurately and synthesise and present information obtained form a variety of sources, orally and in writing;

- develop discussion and evaluation skills in responding to texts;

- respond to the style and organisation of literary, information and media texts;

- write clearly and coherently in a variety of forms and styles and for a range of purposes and audiences;

- work with increasing accuracy and complexity in spelling, grammar and punctuation; and

- appraise their own work and that of others to become reflective and evaluative in speaking and listening, reading and writing tasks.

You may consider if the teaching and provision for **Mathematics** enables pupils to:

- acquire and use a wide range of mathematical vocabulary and notation accurately when speaking and writing about mathematics;

- listen carefully and ask and answer questions using mathematical terminology accurately in their descriptions and accounts; and

- use their writing skills to present data in a variety of ways, such as ordering events in time, setting out an argument and using tables and graphs as effective means of communication.

You may consider if the teaching and provision for **Science** enables pupils to:

- acquire a vocabulary of scientific terms;

- listen carefully and ask and answer questions using scientific terminology accurately in their descriptions and accounts;

- read, select and analyse information accurately from text, photographs, diagrams, tables, charts and graphs; and

- write clear well-presented accounts of investigative and experimental work using suitable forms of writing.

You may consider if the teaching and provision for **Design and Technology** enables pupils to:

- listen carefully and ask and answer questions using suitable terminology accurately in their descriptions and accounts;

- acquire a vocabulary of DT terms;

- read source material accurately and select written and visual information appropriate to the task;

- choose and use suitable forms of writing, including ICT, to present design ideas; and

- produce clear well-presented written evaluations of their work.

You may consider if the teaching and provision for **Information and Communications Technology** enables pupils to:

- improve their oral work and develop their knowledge and use of language through the use of audio and video equipment;

- acquire a vocabulary of ICT terms;

- obtain, prepare, process and present information from a wide range of ICT sources, including the Internet;

- improve the quality of their writing by drafting, editing and re-drafting their work using their word-processing skills; and

- consider carefully the framing of questions when undertaking work involving questionnaires or when interrogating a database.

You may consider if the teaching and provision for **History** enables pupils to:

- improve their oral work and develop their knowledge and use of language through discussion, evaluation and interpretation of historical evidence;

- acquire a vocabulary of historical terms;

- read widely to obtain, interpret and present information from a wide range of historical sources, including ICT, recognising and discounting bias where appropriate; and

- organise and communicate effectively in writing, their knowledge and understanding of the past.

You may consider if the teaching and provision for **Geography** enables pupils to:

- improve their oral work and develop their knowledge and use of language through discussion, evaluation and interpretation of geographical evidence;

- listen carefully and ask and answer questions using geographical terminology accurately in their descriptions and accounts;

- acquire a vocabulary of geographical terms;

- read accurately to obtain and interpret information from a wide range of sources, including written and electronic sources; and

- use a range of forms of writing competently and with increasing complexity to show their geographical knowledge, understanding and skills.

You may consider if the teaching and provision for **Art and Design** enables pupils to:

- acquire a vocabulary of art terms;

- read accurately to obtain and interpret information from a wide range of sources, including written and electronic sources; and

- use a range of forms of writing competently and with increasing complexity and accuracy.

You may consider if the teaching and provision for **Music** enables pupils to:

- develop their oral skills, in particular diction, when discussing music;

- acquire a vocabulary of musical terms;

- listen carefully and ask and answer questions using musical terminology accurately in their descriptions and accounts;

- read accurately to obtain and interpret information from a wide range of sources, including written and electronic sources; and

- use a range of forms of writing competently and with increasing complexity and accuracy.

You may consider if the teaching and provision for **Physical Education** enables pupils to:

- listen attentively to others, such as teaching instructions and when planning sequences and solving problems;

- talk about, describe, evaluate accurately and make judgements about their own and others' performances;

- acquire and use appropriate terminology when analysing, evaluating and explaining aspects of their work;

- read accurately to obtain and interpret information from a wide range of sources, including written and electronic sources; and

- use a range of forms of writing competently and with increasing complexity and accuracy.

You may consider if the teaching and provision for **Religious Education** enables pupils to:

- develop their understanding of language through the forms and character of religious texts and their use of similes, metaphors and other symbolic and figurative language;

- acquire a vocabulary of religious terms;

- develop their oral skills in posing questions, narrating, explaining and comparing features of religious belief and practice;

- read accurately to obtain and interpret information from a wide range of sources, including written and electronic sources; and

- use a range of forms of writing competently and with increasing complexity and accuracy.

## Annex 2

**Using numeracy skills across the Foundation Phase curriculum for children aged 3 to 7-years-of-age**

You should use the following information to help you make judgements about how well children's numeracy skills help them **access** areas of learning and how well the wider curriculum itself develops the skills of using mathematical information, calculating, and interpreting and presenting findings.

You need to ascertain how well children progress from needing support to becoming both independent and interdependent learners who can use their numeracy skills effectively.

You may consider if the teaching and provision for **Personal and Social Development, Well-being and Cultural Diversity** enables children to:

- use numbers, shapes, measurement and coins and join in with familiar number rhymes and songs, including those in the different range of languages that exist in Wales;

- sort, match, sequence and compare objects and events, and explore and create simple patterns; and

- develop their understanding of measurement, shape, position and movement in both the indoor and outdoor environment.

You may consider if the teaching and provision for **Language, literacy and communication skills** enables children to:

- use numbers, shapes, measurement and coins and join in with familiar number rhymes, songs and stories;

- sort, match, sequence and compare objects and events, and explore and create simple patterns;

- progress from understanding that written symbols have meaning to reading and interpreting data presented in lists, tables, charts and graphs; and

- record and present their work in a variety of ways

You may consider if the teaching and provision for **Mathematical Development** enables children to:

- use numbers, shapes, measurement and coins and join in with familiar number rhymes, songs and stories;

- understand number and number notation and develop a range of flexible methods for working mentally with number, moving on to more formal methods;

- sort, match, sequence and compare objects and events, and explore and create simple patterns;

- progress from understanding that written symbols have meaning to reading and interpreting data presented in lists, tables, charts and graphs; and

- record and present their work in a variety of ways

You may consider if the teaching and provision for **Welsh Language Development** enables children to:

- use numbers, shapes, measurement and coins and join in with familiar Welsh number rhymes, songs and stories;

- sort, match, sequence and compare objects and events, and explore and create simple patterns;

- progress from understanding that written symbols have meaning to reading and interpreting data presented in lists, tables, charts and graphs; and

- record and present their work in a variety of ways

You may consider if the teaching and provision for **Knowledge and Understanding of the World** enables children to:

- use numbers and develop their understanding of measurement, shape, position and movement in both the indoor and outdoor environment;

- understand number and number notation and develop a range of flexible methods for working mentally with number, moving on to more formal methods;

- sort, match, sequence and compare objects and events, and explore and create simple patterns;

- progress from understanding that written symbols have meaning to reading and interpreting data presented in lists, tables, charts and graphs; and

- record and present their work in a variety of ways.

You may consider if the teaching and provision for **Creative Development** enables children to:

- use numbers, shapes, measurement and coins and join in with familiar number rhymes, songs and stories;

- develop their understanding of measurement, shape, position and movement in both the indoor and outdoor environment;

- sort, match, sequence and compare objects and events, and explore and create simple patterns;

- progress from understanding that written symbols have meaning to reading  and interpreting data presented in lists, tables, charts and graphs; and

- record and present their work in a variety of ways.

You may consider if the teaching and provision for **Physical Development** enables children to:

- use numbers, sort, match, sequence and compare objects and events, and explore and create simple patterns;

- develop their understanding of measurement, shape, position and movement in both the indoor and outdoor environment;

- progress from understanding that written symbols have meaning to reading  and interpreting data presented in lists, tables, charts and graphs; and

- record and present their work in a variety of ways.

You may consider if the teaching and provision for **religious education**
enables children to:

- sort, match, sequence and compare objects and events, and explore and create simple patterns;

- progress from understanding that written symbols have meaning to reading  and interpreting data presented in lists, tables, charts and graphs; and

- recording and presenting their work in a variety of ways.

## Using the skill of numeracy across the curriculum for pupils aged 7 to 19 years-of-age

You should use the following information to help you make judgements about how well pupils' numeracy skills help them **access** the whole curriculum and how well the wider curriculum itself develops the skills of using mathematical information, calculating, and interpreting and presenting findings.

You need to ascertain how well pupils progress from needing support to becoming both independent and interdependent learners who can use their numeracy skills effectively.

You may consider if the teaching and provision for **Welsh or English**, **Welsh second language** and **Modern Foreign Languages**, where applicable, enables pupils to:

- develop their number skills in the relevant  language including number rhymes, ordering numbers, ordering events in time and using number in relevant contexts;

- gather information in a variety of ways, including questionnaires; and

- record, interpret and present data in charts, diagrams, tables and graphs.

You may consider if the teaching and provision for **mathematics** enables pupils to:

- select and use appropriate mathematics to solve problems and check results, considering whether they are reasonable;

- develop their number skills through a range of appropriate mental, written and calculator computational strategies;

- use mathematical knowledge and understanding in areas of measurement and shape and space;

- gather information in a variety of ways, including questionnaires, and choose appropriate data from given information; and

- record, interpret and present data in charts, diagrams, tables and graphs, choosing appropriate styles of representation to present information.

You may consider if the teaching and provision for **science** enables pupils to:

- select and use appropriate mathematics to solve problems and check results, considering whether they are reasonable;

- develop their number skills and use a range of appropriate mental, written and calculator computational strategies accurately and effectively;

- use mathematical knowledge and understanding in areas of measurement and shape and space;

- gather information in a variety of ways, including questionnaires, and choose appropriate data from given information; and

- record, interpret and present data in charts, diagrams, tables and graphs, choosing appropriate styles of representation to present information.

You may consider if the teaching and provision for **design and technology** enables pupils to:

- develop their number skills in relevant contexts, including scale and proportion;

- use their mathematical knowledge and understanding in areas of measurement and shape and space;

- gather information in a variety of ways, including questionnaires and databases, and choose appropriate data from given information; and

- record, interpret and present data in charts, diagrams, tables and graphs, choosing appropriate styles of representation to present information.

You may consider if the teaching and provision for **information and communications technology** enables pupils to:

- develop their number skills in relevant contexts, including collecting data for interpretation in spreadsheets and simulations;

- gather information in a variety of ways, including questionnaires and databases, and choose appropriate data from given information; and

- record, interpret and present data in charts, diagrams, tables and graphs, choosing appropriate styles of representation to present information.

You may consider if the teaching and provision for **history** enables pupils to:

- develop their number skills in relevant contexts, including ordering events in time;

- gather information in a variety of ways, including questionnaires; and

- record, interpret and present data in charts, diagrams, tables and graphs.

You may consider if the teaching and provision for **geography** enables pupils to:

- develop their number skills in relevant contexts, including scale;

- use their mathematical knowledge and understanding in areas of measurement and shape and space;

- gather information in a variety of ways, including questionnaires and databases, and choose appropriate data from given information; and

- record, interpret and present data in charts, diagrams, tables and graphs, choosing appropriate styles of representation to present information.

You may consider if the teaching and provision for **art and design** enables pupils to:

- develop their number skills in relevant contexts, such as scale and proportion; and

- use their mathematical knowledge and understanding in areas of measurement and shape and space.

You may consider if the teaching and provision for **music** enables pupils to:

- develop their number skills in relevant musical contexts.

You may consider if the teaching and provision for **physical education** enables pupils to:

- develop their number skills in relevant contexts, such as scale and time;

- use mathematical knowledge and understanding in areas of measurement and shape and space;

- gather information in a variety of ways, including questionnaires and databases, and choose appropriate data from given information; and

- record, interpret and present data in charts, diagrams, tables and graphs, choosing appropriate styles of representation to present information.

You may consider if the teaching and provision for **religious education** enables pupils to:

- develop their number skills in relevant contexts, including ordering events in time;

- gather information in a variety of ways, including questionnaires; and

- record, interpret and present data in charts, diagrams, tables and graphs.

**Annex 3**

**Developing ICT skills across the Foundation Phase curriculum for children aged 3 to 7-years-of-age**

You should use the following information to help you make judgements about how well children's ICT skills help them **access** areas of learning and how well the wider curriculum itself develops these skills as well as an awareness of basic safety and e-safety rules in line with their age and stage of development.

You need to ascertain how well children progress from needing support to becoming both independent and interdependent learners who can use their ICT skills effectively.

You may consider if the teaching and provision for **Personal and Social Development, Well-being and Cultural Diversity**, where applicable, enables children to:

- show growing perseverance and confidence in choosing and completing ICT tasks;

- use selected websites, CDs and DVDs to develop a knowledge of the different cultures that exist in Wales;

- navigate through an adventure/simulation and make decisions to solve problems;

- become familiar with and confident in using technology in their play and every day activities, such as using cash registers and mobile phones; and

- begin to use a digital and video cameras, such as in indoor and outdoor activities and role play

You may consider if the teaching and provision for **Language, literacy and communication skills** enables children, where applicable, to:

- listen with enjoyment and respond to stories, poems, songs and rhymes on screen and in educational broadcasts;

- use menus to search for and find information;

- improve the quality of their emerging writing by drafting, editing and re-drafting their work while developing their word-processing skills; and

- use an increasing range of ICT tools to record discussions and begin to refine presentations, for example, by using a digital camera and audio recorder.

You may consider if the teaching and provision for **Mathematical Development** enables children, where applicable, to:

- use a variety of ICT resources, such to help explore number and shape, recognise patterns and sequences;

- use simulation software to complete tasks, for example, sorting and sequencing objects on a screen;

- extract, interpret and present information using pictographs, block and bar graphs;

- interrogate a database using a simple search; and

- amend a sequence of instructions and begin to understand angle as a measure of turn while playing with a programmable toy.

You may consider if the teaching and provision for **Welsh Language Development** enables children, where applicable, to:

- listen with enjoyment and respond to stories, poems, songs and rhymes on the computer screen and/or in good quality educational broadcasts and selected websites;

- use menus to search for and find information;

- improve the quality of their emerging writing by drafting, editing and re-drafting their work while developing their word-processing skills; and

- use an increasing range of ICT tools to record discussions and begin to refine presentations, for example, by using a digital camera/video and audio recorder.

You may consider if the teaching and provision for **Knowledge and Understanding of the World** enables children, where applicable, to:

- use a variety of ICT sources to find information, such as interactive books and encyclopaedias, online atlases, maps, images, satellite images; and

- navigate through an adventure/simulation and make decisions to solve problems and complete a variety of tasks.

You may consider if the teaching and provision for **Creative Development** enables children*, where applicable,* to:

- use a digital audio or video device to record their use of descriptive vocabulary, when responding to pictures, words and a range of different stimuli;

- develop creativity skills through using a computer drawing programme; and

- explore sounds and create different ways of making and organising musical compositions using a range of ICT sources.

You may consider if the teaching and provision for **Physical Development** enables children*, where applicable,* to:

- develop their fine motor skills through using a range of ICT equipment and resources, such as the mouse and a digital camera;

- begin to use a video camera to evaluate their work using a growing vocabulary to convey meaning; and

- use ICT to record their work, including devised games and rules.

You may consider if the teaching and provision for **religious education** enables children*, where applicable,* to:

- use an increasing range of ICT tools to record their discussions and begin to refine their presentations;

- navigate through simulations and make decisions to solve problems; and

- use virtual reality simulations to explore places of worship.

## Developing ICT skills across the curriculum for pupils aged 7 to 19 years-of-age

You should use the following information to help you make judgements about how well pupils' ICT skills help them **access** the whole curriculum and how well the wider curriculum itself develops their ICT skills.

You need to ascertain how well pupils progress from needing support to becoming both independent and interdependent learners who can use their ICT skills effectively and safely.

You may consider if the teaching and provision for **Welsh or English, Welsh second language** and **Modern Foreign Languages**, where applicable, enables pupils to:

- find suitable information safely from a range of sources, such as websites, archive material and DVDs;

- develop information and ideas for specific purposes by processing the information as well as checking for accuracy and plausibility;

- create and present information and ideas, taking account of audience by using and/or combining a variety of different forms of information, such as images, video, graphs, sound and animation;

- improve the quality of their writing by drafting, editing and re-drafting their work using their word-processing skills; and

- safely share information with others, such as via email, attachments, blogs, twitter and virtual learning environments (VLEs).

You may consider if the teaching and provision for **mathematics**, where applicable, enables pupils to:

- plan, create and interrogate a database and questionnaires;

- develop spacial awareness using programmable devices;

- analyse and check the accuracy and plausibility of information, such as information gained from data sources; and

- use relevant modelling software and spreadsheets.

You may consider if the teaching and provision for **science**, where applicable, enables pupils to:

- find a range of scientific information safely from a range of sources;

- use relevant modelling software, such as spreadsheets;

- use data logging equipment, such as to measure temperature, heart rate, pH levels, noise and light levels; and

- use Video Conferencing purposefully, such as linking with an expert in a scientific field.

You may consider if the teaching and provision for **design and technology**, where applicable, enables pupils to:

- use relevant control software so that they can create, test, modify and store instructions to control events;

- use Computer Aided Design(CAD) and Computer Aided Manufacture (CAM), where appropriate;

- use data logging equipment for a range of measurements, such as noise and light levels; and

- use ICT to plan, research, create and evaluate their work.

You may consider if the teaching and provision for **history,** where applicable, enables pupils to:

- find suitable information safely from a range of sources, such as archive and database material and videos from museums and the National Library of Wales;

- check the accuracy and plausibility of information gained from ICT sources;

- improve the quality of their writing by drafting, editing and re-drafting their work using their word-processing skills; and

- use digital cameras purposefully and scanners to digitise text, images and documents.

You may consider if the teaching and provision for **geography**, where applicable, enables pupils to:

- find suitable information safely from a range of sources, such as maps and Geography Information Systems(GIS);

- plan, create and interrogate a database and questionnaires;

- measure, collect and record data; and

- explore the environment, including the locality, through virtual reality simulations.

You may consider if the teaching and provision for **art and design,** where applicable, enables pupils to:

- use relevant CAD-CAM software where relevant; and

- use relevant graphics and modelling software and websites.

You may consider if the teaching and provision for **music,** where applicable, enables pupils to:

- use audio and video recording equipment, such as digital recording (MP3), video (MP4) to record, analyse and refine their work; and

- use relevant software and music technology for composing.

You may consider if the teaching and provision for **physical education,** where applicable, enables pupils to:

- use video recording equipment to record, analyse and refine work; and

- use data logging equipment, such as for measuring heart beat and temperature.

You may consider if the teaching and provision for **religious education,** where applicable, enables pupils to:

- find suitable information safely from a range of sources, such as archive material and DVDs;

- use ICT for exploring places of worship, such as virtual tour of a mosque;

- safely share information with others – via email, attachments, blogs, twitter, virtual learning environments (VLEs);  and

- use Video Conferencing purposefully, such as when interviewing people from other faiths or discussing alcohol and drug issues.