

## 5-14 ICT Progression of Activities Nursery – P7



### Introduction

#### Aims

The aim of this document is to provide SBC Primary teachers with a progressive set of pupil skills and activities, clearly matched to ICT levels A-E, but presented as eight 'sets' – one for each year group from Nursery to P7. This format should provide a coherent 'Programme of Study', or 'Progression of Activities' across the school, allowing teachers to build on work carried out by pupils in the previous year. Many teachers have indicated that they would find this approach useful, particularly for teachers moving from one stage to another. For each year group there are Learning Outcomes listed within the seven main strands of 5-14 ICT, together with a set of suggested activities and resources.

Documents already exist in schools which describe the Learning Outcomes for 5-14 ICT Levels A-E and match activities to the strands (Some of these are already on the [www.educationict.org.uk](http://www.educationict.org.uk) website) Many schools will already have in place some kind of ICT progression of activities. This document is intended for additional guidance and can be adapted to suit or supplement existing school programmes.

#### The document and associated files

This booklet can be reproduced on paper for ease of use within planning folders, but staff should be made aware that all the files will be made available to SBC schools electronically as both MS Word documents (which can be altered or added to by the school) and Adobe .pdf files (which are not easily edited.) One major advantage of teachers using the MS Word files electronically is that the embedded hyperlinks in the document will link directly to the suggested websites. Teachers should be encouraged to use the document electronically when exploring the suggested activities. When the proposed Network 'Optimisation' has been carried out (September 2003), there will be a special 'Staff Write' folder where these files can be placed for ease of access by teachers. The files will also be available on this website from the beginning of September 2003.

[http://www.educationict.org.uk/5-14\\_progression.htm](http://www.educationict.org.uk/5-14_progression.htm)

### Content and Progression of Activities

#### RM Connect systems software.

The activities listed for each year group are those which can be carried out in all SBC Primary schools using the current provision of RM software on the RM Connect networked systems. We have not listed activities which require additional software. Neither have we listed activities which may be possible in certain schools as a result of their choice to purchase specific software or CD-Rom resources. However, we have made reference to the use of a digital camera and to the digital microscope. A review of the document in 2004 to take account of additional software and hardware changes/additions, and developments in ICT Science resources is planned.

#### Adjustments to 5-14 document guidelines.

ICT is an area of rapid development and change. Since publication of the 5-14 ICT National Guidelines, some of the references to particular skills have been overtaken by the provision of the RM Connect network systems (For example, connecting/disconnecting to an e-mail server). Adjustments have also been made where there is a mismatch between the levels stated in the guidelines and what experience shows to be a reasonable level for certain tasks to be achievable. Other activities, such as the use of videoconferencing, are not explored in detail as these facilities are not readily available to primary pupils at present. Schools may wish to add their own specific references to the CD-Roms which they regularly use.

**Pace of Learning.**

It is recognised that the pace at which many learning outcomes can be achieved by the majority of pupils is clearly affected by the level of ICT provision in the school, and to some extent, the deployment of these systems. The class management issues facing teachers are different for those working in a suite compared to teachers working with one or two systems in their classroom. However, fundamental to both situations is that there are skills which pupils need taught and understandings that they need to develop, and that opportunities to practice and reinforce these in a meaningful context are important. The activities suggested try to avoid 'learning skills for skills' sake', but suggest a use in context, or to support learning in another area of the curriculum.

**'Time' implications.**

There is clearly a 'time' implication for carrying out the suggested activities. We have not suggested a time allocation, mainly because the level of hardware provision and its deployment is very different from school to school and is currently changing. Schools already with a suite may have set aside a 'timetabled' session(s) for every class whereby every pupil uses the computer for a minimum of a about 40mins per week on teacher directed tasks. Schools with one or two computers per class will manage this in a different way. Teachers should try to connect ICT use with some aspect of the curriculum as often as possible, but their will be occasions when developing ICT skills is in the forefront.

**Building ICT into curriculum forward planning.**

It is hoped that as staff become familiar with the ICT ground to be covered by their year group, they will 'map' the opportunities for integrating certain ICT elements against these forward plans. MEC staff can offer assistance here if necessary. In the composite class scenario, it is hoped that staff will find it useful to have Learning Outcomes for each year group provided, rather than have to work it out themselves (eg P1,2, 3). It is also hoped that the Learning Outcomes are achievable in one year. Staff may not feel this at the outset, while they become familiar with the document. It is anticipated that in most situations staff will need to refer to the sheets for the year group before their current one.

**The Curriculum Topic Bank**

One of the strengths of this document is that the activities are supported by a large range of curriculum resources. These will be made available to all schools as part of the 'Network Optimisation' process (June – September 2003) being carried out by the Network Administrators. Teachers will find these resources within the 'Our School Shared Area' of the network which will be visible on every pupil and staff desktop. (The solution for making these resources available in the smaller schools with RM Schoolshare systems may turn out to be different.) The Curriculum Topic Bank has more that 70 folders covering a wide range of commonly studied topics. Within these folders teachers will find lesson plans, website lists, PowerPoint presentations, electronic worksheets, keyboard practice files, fact banks, picture banks, word banks, internet tasks, Publisher frameworks, 'How to...'sheets. Most of these resources were developed by MEC staff in their work with schools. It is anticipated that staff in schools will add their own materials to their Curriculum Topic Bank. It is also likely that future resource materials authored by MEC staff will be circulated to schools for adding to this Topic Bank.

**Using the Sections for each year group**

It is anticipated that teachers will use the list of Learning Outcomes, and the activities and resources as both a planning and recording document for their class. They may choose to highlight the activities planned, or covered, together with using the final column for their own comments / class assessments / dates etc. (Many schools use a 'highlight', 'tick' and 'date' approach to planning sheets.) It is really for schools to decide how the use of the sheet fits their existing practice, as similar documents already exist for other areas of the curriculum. It is hoped that teachers will familiarise themselves not only with the ground to be covered by their particular year group or stage, but also with what has been covered in the previous year, especially if pupils have not had much access to networked systems in recent years.

For example there may be situations where a P4 teacher prefers to select activities from the P3 section at the outset, appropriate to the experience of the pupils. Between P4, P5, P6 and P7, there is a progression in the 'pace' of the work, even if it is broadly similar to a previous year. Progression lies in the complexity of the task, the sophistication of the pupils' written or graphical content, the appropriateness to the task and the degree of choice/responsibility taken by the pupil, and the expected Learning Outcome.

## Specific Issues

### 'Using the Technology' Strand

This 5-14 strand is presented in a different format to the other sections. The progression across the school is all shown on one document, therefore all teachers will need a copy of this, together with the section specifically for their year group.

### 'ICT Progression – Introducing ICT Words'

All teachers should also have a copy of the 'Introducing ICT words'. Several copies of this page could be made for display in all the computer areas in the school.

### Nursery

It is recognised that at present (August 2003) there is a large variation in the ICT resources available to Nursery staff for their Nursery classes. This document is intended to raise awareness of the types of ICT activity suited to Nursery settings and to help teachers identify and realise the opportunities for integrating aspects of ICT, in its widest sense, into their Nursery curriculum.

The structure of the Nursery section is based on the five 'Key Aspects' of 'A Curricular Framework for Children 3 to 5'. Clearly ICT can support all these Key Aspects, and this section seeks to exemplify this. Our suggested activities are referenced to numbered 'Features of Learning' in this framework. The range of possible activities is obviously greater if Nursery staff and pupils have access to some, or all of the following:- networked computer systems with internet access, CD-Rom, and a digital camera. (Many nurseries are making use of these.)

Nursery teachers looking for ideas about using ICT in its widest sense would be well advised to visit the [www.ictadvice.org.uk](http://www.ictadvice.org.uk) website. Follow these links from the Home page: Teaching and Learning > Curriculum > Foundation. Then click on What is Foundation ICT?

### Primary 1 and Primary 2

The activities suggested for Nursery, P1 and P2 Learning Outcomes reflect the idea that it is at these stages where solid foundations are laid and good attitudes established. An adult helper or teacher will frequently be 'modelling' ICT use. Pupils see adults using ICT in a context: they hear the associated vocabulary and should begin to use it. The vocabulary suggested for each stage is listed in the 'Using the Technology' section.

### Primary 3 and Primary 4

The activities suggested for P3 and P4 Learning Outcomes reflect the idea that pupils at this stage should consistently be showing good working habits, re-visiting early skills if necessary, but learning a wider range of ICT skills-preferably in the context of a topic, or to support a subject area, Language, Maths, ES, RME or Health. Pupils also need opportunities to reinforce these skills frequently.

### Primary 5, Primary 6 and Primary 7

The activities suggested for P5, P6 and P7 reflect the pupils increasing ability to make more informed decisions about the ICT use for a variety of tasks and use computers more independently to support other curricular areas.

## Clicker 4

This programme is currently being rolled out to all SBC Primary schools. It should be installed on most networks by September 2003, and training for teachers should be complete by January 2004. The training is provided by P Whittaker and E Dickinson and is supported by a comprehensive set of notes compiled by P Whittaker.

Clicker 4 provides facilities for text entering from the keyboard or 'on-screen' grid, plus speech. The 'ready-made' Clicker Grids for Learning provide a large collection of text and graphics grids, supporting many common themes across the complete Nursery – Primary 7 age range and ability and access levels.

Teachers of Nursery, P1, 2 and 3, as well as teachers of pupils with additional needs, would be well advised to gain some familiarity with the software, particularly the Clicker Grids for Learning'. To assist teachers in finding their way around this collection of resources we have produced a short catalogue in MS Word format entitled '**A Guide to Clicker 4 – Catalogue of Activities**'. (Thanks to Miss R King Kelso HS, for compiling this.) This will be e-mailed to all SBC schools and should be passed on to all Early Years teachers who have had, or will be having the Clicker 4 training. It is also available on the following website :- [www.educationict.org.uk/pdf/clicker4catalogue.doc](http://www.educationict.org.uk/pdf/clicker4catalogue.doc)

## Internet

We are suggesting that teachers should not 'rush' into allowing pupils to search the internet freely, even under supervision. The internet can be incredibly time wasting, and often disappointing, or hard to understand. Pupils should be given clear guidance on which websites to use. If the focus is on directing pupils to specific content information then teachers will find many MS Word lists of suitable websites in the Curriculum Topic Bank (inside the 'Our Schools Shared Area' of their network.)

These can be accessed by pupils and teachers, copied to their 'My Work' area and used to facilitate quick access to relevant websites. We would discourage teachers from allowing a 'butterfly' approach to browsing websites (skipping idly from one link to another). When pupils are being taught how to search more efficiently, then they should be encouraged to consider carefully what information they are looking for and how to set about identifying and using keywords to find this, before searching and selecting information carefully.

## E-mail

Teachers are naturally cautious about using e-mail, particularly with younger pupils. In younger classes, teacher 'modelling' the use of e-mail, on behalf of the pupils, may be a good starting point. There is considerable effort and patience involved in teaching younger pupils about their e-mail address, especially as the school addresses are often long and complex. However, teachers who have persevered with this are in no doubt as to the benefits and motivation it affords their pupils. Successful approaches have included providing a small laminated card (from P1) for every pupil, which clearly shows their Log-on name, password (if any), and their full school email address. These cards are always kept by the teacher in school when not in use. Pupils become accustomed to seeing the combinations of letters, and with practice, can eventually type in their own, and others pupils e-mail addresses. See the example below.

My Log-on <b>USERNAME</b> is	<b>FSMITH</b>
My <b>e-mail</b> address is	<b>fsmith@stirches.scotborders.sch.uk</b>

Imaginative approaches to using e-mail in the context of the 'Castles Writing Pack' or to support a book study - (for example, pupils e-mail the 'Lighthouse Keeper' – teacher in role,) are encouraged.

## **Controlling and Modelling**

For many schools, there are limitations to what can be carried out in this strand with current resources. For example, it is unlikely that primary schools will use 'robot' arms. The Learning Outcomes and activities listed in this document are restricted to what teachers could usefully achieve with one, or more, Roamers, and the on-screen 'Roamer World' program on the network systems. Some schools may have purchased additional software which supports further activities in controlling and modelling.

## **PowerPoint and Multimedia**

Teachers might normally assume that PowerPoint is solely for use by older primary pupils. However, we have included in the Curriculum Topic Bank a set of four PowerPoint presentations which are intended to introduce younger pupils, from Nursery, P1, P2 and P3 to the use of multimedia. These can be found in the PowerPoint folder within the Curriculum Topic Bank and are referred to as Stage 1, 2, 3 & 4. They provide a progressive set of letter, word, and sentence activities which combine the addition of some text (with adult help if necessary) with some ready-made animated clip-art scenes.

Web authoring and building web pages provides the next step for pupils already familiar with certain aspects of multimedia. At the present time only a few primary schools have started working with web pages. This will no doubt change in the foreseeable future. The recommended software for SBC primary schools to use for this is MS Front Page 2000, but schools will have to purchase this from Learning and Teaching Scotland. We would suggest that teacher wishing to use this software should attend one of the 'Front Page 2000' courses listed in the CPD Directory 2003-2004.

## **The Teacher's Toolkit**

At a few points in the document there is a reference to 'The Teacher's Toolkit'. This refers to the white box of A4 coloured booklets which was provided to schools from RM during the original installation of their RM systems. The booklets give instructions and ideas on how to use each of the RM software packages, and many teachers have already found them useful.

## **Abbreviations used throughout the document.**

For ease of identification, on occasions where a website is referenced we have prefixed this with **(W)**  
For example **(W)** <http://www.educationict.org.uk>

Where a resource is available in the Curriculum Topic Bank we have prefixed this with **(CTB)**.

## **In closing**

We hope that teachers will find this resource, together with the resources provided in the Curriculum Topic Bank, extremely useful. It gives us great pleasure to share the resources which we have created during our work with your classes and many of the primary pupils in SBC.

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**Melrose Education Centre**

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