

COMPUTING

POLICY

Clowne Infant and
Nursery School

Introduction

The 2014 national curriculum introduces a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity. It gives schools the chance to review and enhance current approaches in order to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

Clowne Infant and Nursery Computing Policy

The Acceptable Use of ICT and E -Safety Policy should also be read in conjunction with this policy.

Aims and Purposes

The Computing curriculum should offer opportunities for our children to:

- Meet the requirements of the national curriculum programmes of study for computing.
- Develop their understanding of the fundamental principles and concepts of computer science.
- Develop their skills in using hardware and software to manipulate information in their process of problem solving, recording and expressive work;
- Develop a high quality computing education which equips them to understand and change the world through logical thinking and creativity.
- Develop their understanding of how digital systems work and to become digitally literate individuals.
- Explore their attitudes towards ICT, its value for themselves, others and society, and their awareness of its advantages and limitations
- To develop the understanding of how to use computing safely and responsibly.

Computer science

Our children should:

Acquire and develop the skills associated with computer science in order to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some algorithms work and detect and correct errors in algorithms and programs.

- Understand computer networks including the internet; how they can provide multiple services such as the world wide web.

I.T.

Our children should:

Acquire and develop skills associated with Information technology in order to:

- Use search engines effectively.
- Select, use and combine a variety of software on a range of digital devices to fit the purpose of the lesson
- Acquire and refine the techniques eg saving, copying, checking the accuracy of input and output needed to use ICT;
- Drawing and interpreting graphs and bar charts in real contexts;

Digital literacy

Our children should

Acquire and develop their skills in digital literacy in order to:

- Understand the opportunities networks offer for communication and collaboration.
- Be able to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Language and Communication

Our children should:

- Use the appropriate technical vocabulary;
- Read non-fiction and extract information from sources such as reference books, websites or CD-ROMs.

Values and Attitudes

Our children should:

- Work with others, listening to their ideas and expertise and treating these with respect eg cooperating and collaborating when using a computer as part of a group to ensure that all contribute.
- Be aware of the security of their own and other people's information in electronic form
- Consider the origin and quality of information and its fitness for purpose;

- Recognise the strengths and limitations of ICT and its users eg recognising that a word processor is an effective and efficient tool to help writing, but, on occasion, handwritten text is more appropriate;
- Develop knowledge and understanding of important ideas, processes and skills and relate these to everyday experiences;

Features of Progression

To ensure children make progress in computing, teaching should promote opportunities for children, as they move through the Key Stage, to progress:

- From using single forms of information to combining different types of information, matching the form of presentation to the audience and what is being communicated;
- From personal use of ICT to using ICT to meet the needs of, and communicate with, others;
- From using ICT to replicate and enrich what could be done without ICT e.g. playing a word game or drawing a picture to using ICT for purposes that could not have been envisaged without it such as exploring 'what if' situations and modelling new ones;
- From using everyday language to describe work with ICT to increasingly precise use of technical vocabulary and ways of recording;
- From personal use of ICT in a few areas to understanding a wider range of uses of ICT and the consequences of its use for themselves, their work and others;
- From using ICT to address a single task eg writing a story to addressing more complex issues.
- From organising information as separate items eg single graphic image to organising information in sequences and more complicated, interactive, structures eg using multiple images and text boxes.