

Newchurch Community Primary



Policy - Computing

Mission Statement

Newchurch will give every child a flying start by working in partnership with parents, staff and the community to develop well-rounded citizens who will contribute in a positive way to society.

Persons with Responsibility

John Duckett
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Linked Policies

Online safety Policy

Next Review: September 2022

The modern world relies on the use of information and communication technology more and more as a means of interaction, business and entertainment. Many of the core systems within modern Britain and the wider world are run using technology. Ensuring that our children are able to master the skills needed to interact with, decode and program these systems is essential. At Newchurch Primary, we aim to offer a well-structured, thorough and creative curriculum built around quality hardware, software and staff knowledge. We strive to ensure that our pupils can interact with technology on various platforms, interpret information across the curriculum, communicate via a variety of devices and ultimately employ information and communication technology in their lives and future careers.

The computing curriculum covers the three main disciplines within modern technology:

- **Computer science** - is the study of the foundational principles and practices of computation and computational thinking, and their application in the design and development of computer systems.
- **Digital literacy** - understood as basic functional skills, such as the ability to use a keyboard, mouse, email and web browser.
- **Information technology** - deals with the creative and productive use and application of computer systems, especially in organisations, including considerations of e-safety, privacy, ethics, and intellectual property.

STATEMENT OF COMMITMENT

All children will be given opportunities to develop their understanding, control and use of information and communications technology through the computing curriculum, regardless of any barriers. The aim of every area of the curriculum at Newchurch Primary School is an inclusive approach to learning.

SCHEME OF WORK

The National Curriculum (2014) Programmes of Study will be taught through the both topic work and cross-curricular computing sessions. These will be delivered using the planning structure established in collaboration with Knowsley City Learning Centres. The sessions will give every pupil access to a broad range of packages and applications along with use of various hardware. This curriculum will ensure progressive use of skills, means for application and vocabulary.

Early Years Foundation Stage:

It is important in the foundation stage to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources. Recording devices can support children to develop their communication skills.

The children will also have access to computing resources such as iPads and laptops as many children on entry are demonstrating advanced skills in using such devices.

By the end of Key Stage 1 pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict and computing the behaviour of simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works and to 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; and the opportunities they offer for communication and collaboration.
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use and combine a variety of software, (including internet services), on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

ONLINE SAFETY

Online safety is an integral part of the Newchurch computing curriculum and will be taught in every year group through the 'My Online Life' unit of study. Children will be made aware of how to stay safe both in school and when using online devices at home. This will be outlined within the Online Safety Policy document.

Each child will also have a personal login to use any online device within school. This will consist of a username and four-digit password. These codes will be stored centrally in the school office and will also be made available to class teachers. These codes will allow for the tracking of which users have accessed specific devices.

GOOGLE SUITE

In line with modern technology and demands on the curriculum, all children will be assigned a Google account linked to the @newchurchprimary.co.uk domain. This will allow for the children to log in at home and in school. Offering a means for completing, reporting and saving their work.

GENERAL DATA PROTECTION REGULATION (GDPR)

In line with current government legislation access to any online service where children are required to login, permission will be sought to ensure that children are safe and that parents are aware of the programmes being used. All programmes used in school will have been checked and assessed by a staff member or the computing lead prior to use and will be deemed safe for children.

ASSESSMENT

Every year the subject leader will monitor progression and progress through teacher assessment, work recorded and pupil conferencing and offer support where individual teachers feel there is a need. The teacher will use the individual tasks and observation of individual children's contribution during whole class discussions for assessment throughout each unit of work. Computing trackers based on Knowsley CLC assessment will be used to assess the children against age related expectations. Teachers will complete the trackers for analysis and monitoring each term.

MONITORING AND EVALUATION

Computing will be monitored by the subject leader. This will be completed in a number of ways:

- Work monitoring;
- Pupil conferencing;
- Observation during lessons by specialists and assemblies;
- Planning monitoring;

The subject leader will also liaise with the computing link governor to monitor the attainment and progress as well as provision in computing.