# Christ Church (Church of England) Infant School and Nursery



# Computing Policy

'Working together to build a strong foundation through Faith and learning'.

1. **Whole School Aims/ vision:**

At Christ Church Infant School we believe that children should have access to a computing curriculum that is rich in variety and allows children to explore technology across the curriculum. We believe that children should be immersed in learning that reflects our technological world and allows them to develop the necessary computing skills needed for lifelong development and participation in the 21st century world.

2. **Purpose**

This policy reflects the school values and philosophy in relation to the teaching and learning of computing. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment. The policy should be read in conjunction with our scheme of work for computing; Christ Church Infant School Computing Planning, which sets out in detail what pupils in different classes and year groups will be taught and how computing can facilitate or enhance work in other curriculum areas. The computing curriculum is divided into 3 separate strands( e-safety, creating digital content and computer science)  and children should be exposed to and develop a deep understanding of the skills included in each one. Good quality and consistent teaching across year groups and Key stages should allow the children to experience and develop these skills in practical based classroom lessons. Children should understand that computing informs many parts of the wider world and that it is essential in a modern world to acquire and master skills to become both technological consumers and contributors. It will also cover the importance of E-safety as the underpinning values for all computing taught in school (see E-safety policy)

This document is intended for:

- All teaching staff
- All staff with classroom responsibilities
- School governors
- Parents
- Inspection teams
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Copies of this policy are kept centrally and are available from the Executive Head teacher and the subject leader.

3. **Statement of Intent – Aims and Objectives**

**Aims**

• To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment from their activities
• To develop a whole school approach to computing ensuring continuity and progression in all strands of the computing National Curriculum across both the Infant and Junior school
• To use computing as a tool to support teaching, learning and management across other areas of the curriculum

• To provide children with opportunities to develop their computing capabilities in all areas specified by the Curriculum.
• To ensure ICT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities.
• To maximise the use of computing in developing and maintaining links between other schools, the local community including parents and other agencies.

## Objectives

In order to fulfil the above aims it is necessary for us to ensure:

- A continuity of experience throughout the two schools both within and among year groups and through the systematic progression from key stage 1 to 2.
- That the National Curriculum programmes of study and their associated strands, level descriptions and attainment target are given appropriate coverage.
- That all children have access to a range of ICT resources.
- That computing experiences are focussed to enhance learning and that cross curricular links are exploited where appropriate.
- That children's experiences are monitored and evaluated.
- That resources are used to their full extent.
- That resources and equipment are kept up to date as much as possible
- That staff skills and knowledge are kept up to date.

## British values within the computing curriculum

Children at Christ Church Infant School demonstrate the following British values whilst learning about Computing by:

**Democracy**
- Listening to everyone's ideas in order to form a majority.
- Working as part of a team and collaborating to use computing devices effectively.

**Rule of Law**
- Developing knowledge of lawful computing behaviours.
- Demonstrating respect for computing laws.

**Individual Liberty**
- Taking responsibility for our own computing behaviours.
- Challenging stereotypes and bias.
- Exercising rights and personal freedoms safely through knowledge of E-safety.

**Respect and Tolerance**
- Showing respect for other cultures when undertaking research using computing devices. Providing opportunities for pupils of all backgrounds to achieve in computing.

4. **Legislation**

All software loaded on school computer systems must have been agreed with the designated person in the school. All our software is used in strict accordance with

the licence agreement. We don't allow personal software to be loaded onto school computers.

## 5. Role of individuals

**The Role of the Computing Coordinator:**

The Computing leader is responsible for:

- Giving guidance to staff to try and ensure that the statutory requirements of the National Curriculum for Computing are being met.
- Ensuring that students are exposed to a rich variety of technologies and their uses both directly in computing lessons and in broader school life.
- Encouraging computing skills to become embedded across the curriculum where appropriate.
- Identifying staff that may want/require professional development opportunities to be provided.
- Ensuring that teaching of the computing curriculum allows all pupils to have a broad understanding of how computing skills can be applied across areas.
- Encouraging learners to become independent users of technology, choosing when, where, and how they will learn, both in-school and beyond.
- Ensuring regular and appropriate assessment of Computing takes place through observations and half termly feedback forms.

**The Role of staff:**

Each member of staff is responsible for:

- Ensuring that children have access to an engaging and creative computing lessons.
- Ensuring full coverage of the National Curriculum for Computing.
- Modelling correct e-Safety behaviour and ensuring children receive age-appropriate e-Safety information and activities.
- Regular assessment of children's computing capability through observations and feedback forms.
- Liaison with Computing Coordinator

**Executive Head Teacher/ Head of school and Governors:**

The role of the executive Head Teacher/ Head of school and Governors:
- Monitor the delivery and implementation of the Computing curriculum through observation and discussion.
- Decide ways in which developments can be assessed, and records maintained
- Determine the ways computing should support, enrich and extend the curriculum
- Decide the provision and allocation of resources
- Ensure that ICT is used in a way to achieve the aims and objectives of the school; ensures that there is a computing policy, and identifies a computing co-ordinator.

The overall responsibility for the use of ICT and the delivery of the computing curriculum rests with the senior management of a school; the Executive Head/ Head of school and governors, in consultation with staff.


## Technical Support:

Technical support is an integral part of Computing within our school and should be planned and managed accordingly. We receive in-school support from CONCERO.

**Roles and responsibilities of technical support:**

- **Set-up, systems administration and preventive maintenance**: day-to-day management, set-up and administration of Computing  services and facilities
- **Problem solving**: assisting classroom practitioners and diagnosing and solving/repairing problems and faults as they occur
- Reviewing, maintaining and updating hardware and software in line with the schools vision for delivery of e-Learning, including spyware and monitoring software on all devices across the school.

**Typical tasks carried out by our Technical Support might include:**
- administrative tasks (such as logging assets, labelling and security marking, keeping track of repairs and service failures, maintaining stocks of consumables such as toner and paper)
- Basic maintenance of projectors.

- regular or pre-emptive checking of computers, network components and connections
- checking/testing of software and hardware for compatibility prior to installation
- installation of new equipment and software
- installation of software updates
- configuration of hardware and software (after installation)
- regular back-up of data and ensuring recovery capability
- network management, such as allocating resources, and setting up access rights and user profiles

## 6. Standards and expectations

The national Computing national curriculum states that pupils in KS1 should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
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At Christ Church we cover all of these aspects across year 1 and 2 and also start introducing some of them at the EYFS level to allow deeper understanding of and familiarity with technologies when entering KS1.

## 7. Learning, planning and teaching

Planning at Christ Church Infant school is available in Long term format which provides an overview of what will be covered in each half term block, medium term which breaks down a brief overview of what will be taught in each lesson in that block and in short term format which is completed weekly by teaching staff in each year group. Short term plans identify the skills that are being taught in each unit and key resources that need to be or may be used to aid in teaching. . (see curriculum overview, Christ Church MTP/STP Computing planning)

## 8. Assessment

Each half term teaching staff in each class will complete a review of the computing lessons they have taught for that block highlighting areas that worked well and areas that may need development for delivery the following year. These reviews also take into account the children's views of what they have learned and which parts of that teaching block they have found most enjoyable. Staff will then complete an assessment grid indicating whether children are performing at, above or below the age related expectations for that year group. These are passed onto the computing lead for monitoring and also to new teachers as part of the handover for the following year.

The school will report the children's computing levels to parents at least once each year.

## 9. CPD & Skills auditing

All teachers at Christ Church Infant School will be given the opportunity to develop their Computing skills, becoming a confident teacher through relevant training sessions. Teachers are given the opportunity to indicate any areas they may need support with when completing their half termly unit reviews. Additional training may be offered in the form of formal INSET days, staff meetings, course attendance, staff appraisal and individual targets. In addition staff may seek informal advice on teaching and learning from the computing co-ordinator as and when required. Additional training may also be provided for our classroom support staff in order to effectively manage their work and to enhance the work they undertake with pupils. It will be the responsibility of the computing co-coordinator in conjunction with the Executive Head teacher to identify any areas for staff development and inclusion on training courses.

# Computing Overview

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 1 |
|---|---|---|---|---|---|---|
| Yr 1 | Terrific toys<br><br>**Computer science**<br><br>**Programming/coding**<br><br>Bee bots (app / equipment )<br><br>Debug a programme<br><br>Daisy dino (app)<br><br>Kodable | Stomp, Wiggle Crawl<br><br>**Creating digital content**<br><br>**Photography**<br><br>**Cre**ate an edited photo-graph for a Christmas card/ decoration<br><br>Camera on ipad ( app )<br><br>Skitch app<br><br>Photobooth app | Superheroes<br><br>**Computer science**<br><br>**Algorithms - programming**<br><br>Create step by step instructions to create a recipe<br><br>healthy hero's<br><br>• Ipads to video (app)<br><br>• Instructional writing<br><br>• Algorithms<br><br>• Debug | Fabulous fairy tales<br><br>**Creating digital content**<br><br>**Design**<br><br>Create your own fairy tale picture.<br><br>Paint programme (laptop) | Space<br><br>**Creating digital content**<br><br>**Word processing**<br><br>Create a poster<br><br>Word (laptop)<br><br>Publisher  (laptop) | Lets go on and adventure<br><br>**Creating digital content**<br><br>**Animation**<br><br>Create animation about a something seen on an adventure<br><br>Stop motion (app)<br><br>Koma Koma<br><br>Ipads |
| Yr 2 | Walk the plank<br><br>**Computer science**<br><br>**Programming/ coding**<br><br>• Hour of code (laptop)<br><br>• Turtle logo | Arctic adventures<br><br>**Creating digital content**<br><br>**Data handling**<br><br>• 2 count (laptop)<br><br>• 2 graph (laptop)<br><br>• Purple mash (both) | Londons burning<br><br>**Creating digital content**<br><br>**Broadcasting**<br><br>• video app on ipad<br><br>Research element using ipads? | Golden ticket<br><br>**Creating digital content**<br><br>**Digital music**<br><br>• Launch pad (app)<br><br>• Incredibox (laptop)<br><br>• Garage band (app) | Amazing animals<br><br>**Creating digital content**<br><br>**Presentations skills**<br><br>- create a power point presenting animal information. | Awesome adventures<br><br>**Creating digital content**<br><br>**Photography**<br><br>Bazzart **(app)**<br><br>Camera (app)<br><br>Layout (app)<br><br>Morpho  (app)<br><br>Photo booth (app)<br><br>**Computer science—**<br><br>Scratch junior. |

Digital Literacy—All children should understand how to stay safe when using technology The requirement is **6** hours of computing safety each year.

**1 hr** per term at the start of each unit of work + Internet safety day in February (**5hrs**) .

| Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 1 |
|---|---|---|---|---|---|
| Bee bots | Story creator | | | | |
| Kodable | | | | | |
| Daisy dino | | | | | |
| Lego | | | | | |
| Tynker | | | | | |

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