Christ Church C of E Primary School Computing and ICT Policy



'A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.'

Computing programme of Study, DfE, 2013

Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. Computing also ensures that pupils become digitally literate — able to use, and express themselves and develop their ideas through, information and communication technology — at a level suitable for the future workplace and as active participants in a digital world. At Christ Church Primary School, we believe that Computing is an integral part of preparing children to live in a world where technology is continuously and rapidly evolving, so much so that children are being prepared to work with technology that doesn't even exist yet. For this reason, we feel that it is important that children are able to participate in the creation of these new tools to fully grasp the relevance of and the possibilities of emerging technologies thus preparing them for the world of work.

Intent

The National Curriculum computing expectations split the teaching and learning of Computing into three strands (Computer Science, Digital Literacy and Information Technology). It is therefore important that children recognise the difference between what makes each one relevant to their future, as well as their everyday lives. High quality teaching of Computing, from Reception through to Year 6, utilises a combination of practical lessons and theory lessons designed to promote discussion and nurture understanding, which are also relevant to other areas of the curriculum such as PSHE and Citizenship. This policy reflects the values and philosophy in relation to the teaching and learning of and with ICT. It sets out a framework within which teaching and non-teaching staff can operate and give guidance on planning, teaching and assessment. This policy should be read in conjunction with the scheme of learning for Computing that sets out in detail what children in different year groups will be taught and how ICT can facilitate or enhance learning in other curriculum areas.

Objectives

In order to develop the Computing and ICT capability and understanding of each child we will provide through our planning:

- Computing through all three strands taught within the classroom
- Continuity throughout the school to ensure that experience and skills are developed in a cohesive and consistent way
- Access to computers, windows tablets and iPad within class or in designated communal areas
- Experience of a variety of well-planned, structured and progressive activities
- Experience cross-curricular links to widen children's knowledge of the capability of computing including safe use of the Internet and other digital equipment
- Opportunities for children to recognize the value of computing and ICT in their everyday lives and their future working life as active participants in a digital world. By doing this we here at Christ Church Primary, will fulfil the requirements of the National Curriculum

Aims

Computer Science

- To enable children to become confident coders on a range of devices
- To create opportunities for collaborative and independent learning
- To develop children's understanding of technology and how it is constantly evolving

Digital Literacy

- To enable a safe computing environment through appropriate computing behaviours
- To allow children to explore a range of digital devices
- To promote pupils' spiritual, moral, social and cultural development

Information Technology

- To develop ICT as a cross-curricular tool for learning and progression
- To promote learning through the development of thinking skills
- To enable children to understand and appreciate their place in the modern world

Assessment

As in all other subjects, children should be assessed and appraised of their progress in understanding and applying of computing skills. Teacher assessments of computing capability will be recorded throughout the year and reported to parents at the end of each academic year. Staff should keep or save examples of pupils' work and sufficiently detailed records to form a judgement on each pupil's level of attainment at the end of each key stage. Formative assessment occurs on a lesson-by-lesson basis determined by the aims.

Equal Opportunities, Inclusion, Special Educational Needs and Disabilities (SEND)

It is our policy to ensure that all children, regardless of race, class or gender, should have the opportunity to develop computing and ICT capability. We aim to respond to children needs and overcome potential barriers for individuals and groups of children by:

- Ensuring that all children follow the scheme of learning for Computing
- Providing curriculum materials and programmes, which are in no way class, gender or racially prejudice or biased
- Providing opportunities for our children who do not have access at home to use the school computers/Internet to develop independent learning
- Providing suitable challenges for more able children, as well as support for those who have emerging needs
- Responding to the diversity of children's social, cultural and ethnographical backgrounds
- Overcoming barriers to learning through the use of assessment and additional support
- Communication or language difficulties by developing computing skills through the use of all their individual senses and strengths
- Movement or physical difficulties by developing computing skills through utilising their individual strengths
- Behavioural or emotional difficulties (including stress and trauma) by developing the understanding and management of their own learning behaviours

British Values within Computing

Children at Christ Church Primary School demonstrate the following 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

Health and Safety

The school takes very seriously and is aware of the health and safety issues surrounding children's use of ICT. We ensure that pupils have a safe environment in which to learn. We ensure effective filters are in place to safeguard pupils. As such, we will ensure that:

- All fixed and portable appliances in school are PAT tested
- Damaged equipment is reported to the computing leaders and office manager who will arrange for repair or disposal
- E-safety is discretely taught each term by class teachers, through assemblies and class lessons
- Children learn about rights and responsibilities when using the Internet

Security, Legislation, Copyright and Data Protection

We ensure that the school community is kept safe by ensuring that:

- The school technician is responsible for regularly updating anti-virus software.
- The use of ICT and computing will be in line with the school's Acceptable Use Policy (AUP).
- All staff, volunteers must sign a copy of the schools AUP.
- All pupils in KS1 and 2 will read, agree to and sign an age appropriate acceptable use agreement.
- All children are aware of the school rules for responsible use on login to the school network and will understand the consequence of any misuse.
- Reminders for safe and responsible use of ICT and computing and the Internet will be displayed in the ICT suite and around school.

• Software/apps installed onto the school network server and iPads must have been vetted by the lead teacher for suitable educational content before being purchased and installed. No personal software is to be loaded onto school computers or iPads.

All staff members will take appropriate steps to ensure their devices remain secure. This includes, but is not limited to:

- Keeping the device password-protected using strong passwords
- Making sure the device locks if left inactive for a period of time
- Not sharing the device among family or friends

Curriculum Development and Organisation

Our Scheme of Learning is based on the National Curriculum guidelines. All units of teaching and learning are differentiated. Our dedicated ICT suite and additional windows tablets and iPads support the development of Computing and ICT capability by enabling independent learning; encouraging research, and allowing for the creative use of ICT in all subjects. Digital projectors, interactive whiteboards and screen share are available in all classrooms and are used as a teaching and learning resource across the curriculum. An immersive classroom further enhances the children's learning, emotive and language experiences and responses through cross-curricular exploration of ideas and themes. Our school website showcases some of the wealth of experiences that the children are involved in as well as providing help and supportive information for the school community.

Teaching and Learning

Across Key Stage 1 and Key Stage 2, our children will use technology to:

- Learn Programming by using programmable toys, program on screen, through animation, develop games (simple and interactive) and to develop simple mobile apps
- Develop their computational thinking through filming, exploring how computer games work, finding and correcting bugs in programs, creating interactive toys, cracking codes and developing project management skills
- Develop computing creativity by illustrating an eBook, taking and editing digital images, shooting and editing videos, producing digital music, creating geometrical art and creating video and web copy for mobile phone apps
- Investigate computer networks through finding images using the Web, researching a topic, finding out how the school network operates, editing and writing code, creating an e-safety micro-site, and planning the creation of mobile apps
- Communicate and collaborate by producing a talking book, communicating clues, use email, create and write blog pages and design interfaces for apps
- Understand the need for productivity as a life skill through creating a card electronically, record bug hunt data, create surveys and analyse results, record and analyse weather data, create virtual spaces and research the app market
- Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder. Understand the effect of online comments and show responsibility and sensitivity when online.

Teacher's planning is differentiated to meet the range of needs in each class. A wide range of teaching and learning styles are employed to ensure all children are sufficiently challenged. Children may be required to work individually, in pairs or in small groups according to the nature of the task. Different outcomes may be expected depending on the ability and needs of the individual child.

Internet Safety

Internet access is planned to enrich and extend learning activities across the curriculum. However, we have acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies both in school and outside. To prevent children having access to any materials on the Internet which may be illegal, defamatory, inaccurate, obscene or offensive, the school's Internet access will be through a recognised educational service provider, offering a filtered service. In addition, use of the Internet in school by pupils will only be permitted whilst they are supervised by an adult. To further ensure the safety of the children we will teach each class the rights and responsibilities of using the Internet.

A link on the school website homepage gives parents more information on e-Safety. A parental letter for ICT safety is also sent home when children enrol at Christ Church.

Deployment of Computing/ICT Resources

To enable regular and whole class teaching of Computing and ICT, teachers have access to a bank of windows tables, computers as well as iPads.

Every class has an interactive Promethean board linked to the teacher computer which are attached to the school network. The school hall and ICT suite have ceiling mounted projectors and a retractable screen.

Home School Links

Our school website promotes the school and children's achievements as well as providing information and communication between the school, parents and the local community. As well as Twitter and Facebook, Marvellous Me app and our school website are used to keep parents up to date and to share children's achievements in a more accessible way. Messages, texts and/or emails also are sent to parents as reminders or to inform instead of sending letters home with children.

Remote Learning

It is also often referred to as 'remote learning' or 'distance learning'. It is the method of delivering curriculum learning that will be employed in the event of lockdown situations or enforced isolation of children owing to Coronavirus. Here at Christ Church two platforms are predominantly used for children to access the curriculum from home — Seesaw and Google Classroom. Christ Church Primary School is committed to working in close partnership with families and recognises each family is unique and because of this remote learning will look different for different families in order to suit their individual needs. We will, if required, I provide a online training and induction for parents on how to use Seesaw and/or Google Classroom as appropriate and where possible, provide personalised resources. Where possible, it is beneficial for young people to maintain a regular and familiar routine and recommend that each 'school day' maintains structure. We encourage parents to support their children's work, including finding an appropriate place to work and, to the best of their ability, support pupils with work encouraging them to work with good levels of concentration. Every effort will be made by staff to ensure that work is set and assessed promptly.

What is Seesaw?

Seesaw is an online app-based platform that we used during the original lockdown in the spring of 2020 for our younger pupils.

- Seesaw provides a safe online space to share and comment on work. It is managed by EYFS and KS1 teachers and all work / comments must be approved by teachers before it is posted to make sure that it remains safe and appropriate.
- The use of Seesaw is overseen by phase leaders to ensure that the system is used consistently.

The apps are free to use for parents and children. They can be used on smartphones, tablets or computers.

- Each child will have a Seesaw login linked to their class, and parents will be able to download a parents' version to keep track of their child's work.
- Logins will be provided at the start of the school year the use of the apps is user friendly and straight forward to navigate.
- All staff have been trained in using the app and have access to ongoing support and training, if needed.

When school is open as usual, we will use Seesaw to share examples of work, send messages/reminders and share the products of curriculum days. We will also use Seesaw as an online journal of our pupils learning journey through school.

What is Google Classroom?

Google Classroom is an online digital learning environment made by Google that we used during the original lockdown in the spring of 2020 for our older pupils. When logged into Google Classroom, students can collaborate with their peers and teachers. Google Classroom offers a digital safe space for students to view class tasks, access learning materials, view and work on assignments and turn in completed work. Google Classroom provides a safe online space to share and comment on work.

- It is managed by KS2 teachers and all work / comments must be approved by teachers before it is posted to make sure that it remains safe and appropriate.
- The use of Google Classroom is overseen by phase leaders to ensure that the system is used consistently.
- The apps are free to use for parents and children. They can be used on smartphones, tablets, computers and console systems.
- Google Classroom integrates Docs, Sheets, Slides and Gmail into a cohesive platform to manage student and teacher communication.
- Students can be invited to join a class through a private code, or automatically imported from a school domain.
- Google Classrooms uses Google Meets to enhance registration time, lessons, social mingles and game time.
- All staff have been trained in using the app and have access to ongoing support and training, if needed.

Remote Learning Equipment Loaning

A digitally excluded learner is defined as a learner who does not have access to an appropriate internet-connected device and/or internet connection, to engage in online learning activities from home. Here at Christ Church we have made the decision to loan school devices to our pupils that have identified as digitally excluded so that they can access the remote learning more readily and be able to access high quality remote education because of this. The loaning of equipment such as headphones, tablets, keyboards, laptops and even data is something we provide to any in need family. We actively encourage anyone at all to request our help, support and advice. This will be given without question or judgement.

Reviewed: January 2021