Pilsley C of E Primary Computing Policy

May 2021

Rationale and Ethos

'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 Pilsley, 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.

Roles and Responsibilities

The **head teacher**, in consultation with the Computing leader and staff will:

• Determine the ways in which Computing and ICT supports, enriches and extends the curriculum.

• Decide on the provision and allocation of resources.

• Ensure that Computing and ICT is used in a way that achieves the aims and objectives of the school.

The role and responsibilities of the **Computing leader** is to:

• allocate and monitor the effective use of resources within a delegated budget.

• monitor standards to ensure high quality teaching and learning. This may include pupil discussion, work scrutiny, lesson observation and moderation of work.

• involve staff in the development of the subject within school.

• keep staff informed of developments within computing.

• ensure the school follows National Curriculum guidelines.

• evaluate the needs of the school and develop plans to meet those needs.

• support the needs of staff in regards to computing.

• evaluate and promote appropriate use of software by children.

• provide technical support as appropriate.

• promote a positive attitude to computing across school.

• integrate new computing resources into the curriculum and train staff to ensure confidence in their use.

• liaise with external groups and individuals in relation to standards in the subject, including the link governor.

- be accountable for the standards within the subject.

The role and responsibilities of **class teachers** is to:

- identify opportunities to embed computing across the curriculum as appropriate.

- ensure at least one hour per week of curriculum time is dedicated to teaching the computing curriculum.

- provide opportunities for all pupils to use a range of equipment and software in the classroom and across school.

- ensure reasonable adjustments are taken to ensure all pupils can access the computing curriculum.

- evidence teaching and learning as appropriate to the scheme of work (written work, electronic work, planning);

- Make informed judgements of pupil attainment in computing.

Security, Legislation, Copyright and Data Protection

We ensure that the school community is kept safe by making sure that:

- The ICT 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 and children must sign a copy of the schools AUP.

- Parents are made aware of the AUP at school entry.

- 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 all areas. Software/apps installed onto the school network server must have been vetted by the teacher for suitable educational content before being purchased and installed. No personal software is to be loaded onto school computers. Further information can be found in the school's Data Protection policy.

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 appliance in school are tested by a LA approved contractor every twelve months.

- Damaged equipment is reported to the school business manager who will arrange for repair or disposal.

• E-safety is discretely taught each term by class teachers, through Collective Worship sessions and through parent presentations annually. There is also a link on our school website to direct parents to further information on how to keep children safe online. • Children learn about rights and responsibilities when using the Internet.

E-Safety

E-safety relates to the challenges and risks that digital technologies can pose to children. At Pilsley C of E Primary School, we strive to ensure that this issue is seen as one of great importance by our pupils. To reflect this, every year group across school spends at least one half term focusing on online safety with their teacher. Furthermore, we may carry out other activities such as Safer Internet Day and Collective Worship sessions to help ensure that pupils understand the issue of e-safety. We also provide e-safety guidance to parents on our website, including specific information revolving around smartphones and online gaming platforms.

Curriculum Design

Intent

In an ever-changing digital world, computing lessons equip children for the future by providing opportunities to gain knowledge and develop skills. Children follow a progression of skills in the strands: digital literacy, computer science, information technology and internet safety. The computing curriculum at Pilsley enables the children to practice these skills in creative ways that are linked to their topic. We seek to inspire in our children a confidence in using technology in our rapidly developing and changing technological world. We aim to promote resilience, independence, critical thinking, communication skills and problem solving. Our computing curriculum promotes the children's interest in a variety of technology, maximising their potential and presenting to them the many benefits of technology.

At its core is the NC programme of study, this is personalised for our children by dividing the key strands into sub-strands and linking these to our Cornerstones topics and the children's interests.

Progression is ensured by revisiting the key strands repeatedly through a range of topics. This ensures that learning is embedded and that children become competent in safely using and understanding technology.

Implementation

Computing is taught in class groups in regular weekly sessions throughout the year, so that children can revisit and build on their learning. Children also use computing skills throughout their topic work in other subjects. This structure allows children to develop a depth of understanding as well as enabling them to retain the knowledge through consolidation and progression.

At Pilsley, we use the national curriculum objectives for teaching computing. We also use the Sheffield Primary Computing Progression which breaks down the key strands into six sub-strands that provide objectives and skills that children need to learn.

The sub-strands are:

1 & 2. Communicating: Text, Images and Multimedia

3. Understanding and Sharing Data

4. Programming

5. Computational Thinking

6. Online Safety and Digital Literacy

Our long term plans ensure that these strands are covered each year so children will continue to revisit them throughout their learning in computing. At Pilsley we link our computing planning to the Cornerstones topic that the children are doing. This gives purpose to the skills that the children are implementing.

Impact

Children save their work in folders on our pupil network to evidence their key learning in each topic. This allows the class teacher to access their work easily and provide feedback for the next lesson. Pupils receive constant verbal feedback from their teacher during lesson time, opening up a dialogue to discuss their work and how to move forward.

At the end of each topic the children are always given the opportunity to share with their peers. We assess what they have created using two stars and a wish. Two things they have done to meet the objectives and something they can focus on to improve.

The implementation of this curriculum ensures that children are competent and safe users of technology. They will have developed skills to express themselves creatively using digital media and apply their computational thinking.

Assessment for Learning is embedded in practice, with both staff and children continually reflecting on their learning, allowing for support and extension in both knowledge and skills. In every area of school life our pupils are given very high expectations in their behaviour. We have a successful rewards and consequences system, which progresses throughout the school to maintain effectiveness.

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. Facebook is used to keep parents up to date in an accessible way. Texts and emails are sent to parents as reminders or to inform as an addition to sending letters home with children.

Safeguarding

At Pilsley we understand that by nature certain subjects may carry an increased risk of pupil disclosure, in cases where there is a safeguarding risk, school safeguarding policy in relation to Keeping Children Safe in Education 2018 will be followed. All external contributors will be informed of our safeguarding policy prior to working with the children. We also recognise there may be disclosures that aren't safeguarding issues, but opportunities to support the child. If this occurs staff may refer to or suggest appropriate local or national support services or information for pupils and/or their families. If a question raises potential safeguarding concerns, staff should respond in a way that will allow them time to seek advice from the Safeguarding Lead or Deputy Safeguarding Lead by replying with for instance: 'That is a really interesting question and I need time to think because I want to give you a proper answer.'

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

Pilsley School recognises the importance of ensuring that children with identified Special Educational Needs and/or Disabilities have access to an ambitious Computing curriculum. Within this curriculum area, SEND children will be provided with reasonable adjustments through their learning tasks and level of challenge provided. Advice can be sought from the school's SENDCO where applicable.

Links to Other School Policies

This policy should be read alongside the following policies:

- Safeguarding
- Data Protection
- E-Safety
- Acceptable Use
- Behaviour
- Marking and Feedback
- Assessment

Computing has strong links to Maths, Science and Design Technology. These subject policies are available on request.

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Engaging stakeholders

This policy has been produced through engagement with the Headteacher, Governors and Teaching Staff. We will communicate with parents and carers through Pilsley's school website, Pilsley's Facebook Page as well as letters to parents and discussions during parent meetings. As a school we feel it is important to keep parents informed about what we will be discussing so that they can support their child's learning and answer any questions they may have at home. Outside visitors are used to enhance the computing curriculum overall. Visitors are required to follow the ethos of this policy in line with Pilsley's School Visitors and Volunteers Policy.

Computing Policy review date

This policy will be reviewed in May 2023 by the Computing Lead. This will ensure that the policy continues to meet the needs of pupils, staff and parents and that it is in line with current Department for Education advice and guidance.

Appendices

Appendix 1: End of Key Stage Statements

Appendix 2: Key websites to support teaching and learning

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Appendix 2: Key websites to support teaching and learning

https://www.barefootcomputing.org/

https://microbit.org/

E-safety

https://projectevolve.co.uk/

https://swgfl.org.uk/online-safety/

https://www.saferinternet.org.uk/blog/save-date-safer-internet-day-2020

https://www.commonsensemedia.org/