

Next Review Date: September 2023 Signed: 1

1. Introduction

In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. At Great Wilbraham C of E (VC) Primary School (GWPS) we recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world.

"Understand well as I may, my comprehension can only be an infinitesimal fraction of all I want to understand." Ada Lovelace

1.1. Legislation and guidance

This policy reflects the requirements of the National Curriculum programmes of study. It also reflects requirements for inclusion and equality as set out in the Special Educational Needs and Disability Code of Practice 2014 and Equality Act 2010, and refers to curriculum-related expectations of governing boards set out in the Department for Education's Governance Handbook. In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the Early Years Foundation Stage (EYFS) statutory framework.

1.2. <u>Aims</u>

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
- Respond to new developments in technology
- Equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- Enhance and enrich learning in other areas of the curriculum using IT and computing.
- Develop the understanding of how to use computers and digital tools safely and responsibly
- The National Curriculum for Computing aims to ensure that all pupils:

• Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication

• Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

• Are responsible, competent, confident and creative users of information and communication technology.

2. Quality of Education

2.1. Intent of the Curriculum

2.1.1. Curriculum design and coverage

Our curriculum intent for Computing is:

HEAD: pupils are confident users of technology and critically analyse problems to solve HEART: keep safe online and the challenge stereotypes and be aware of sustainability HANDS: encourage creative ways to solve problems and create digital content not just consume it

2.1.2.Knowledge and skills

Our Computing Curriculum is broad and ambitious, and designed to give all our pupils, particularly those that are disadvantaged and pupils with SEND, the knowledge and cultural capital they need to succeed in life. We use teachcomputing.org as a basis for our computing curriculum and adapt where appropriate.

2.1.3.Principles





Next Review Date: September 2023 Signed:

Our principles in this subject follow the core principles for teachcomputing.org and are considered within the planning of every unit of work to ensure a balance over a two year rolling programme. They are:

- Concrete learning (not just abstract but using elements of control)
- Programming (coding is a key part of every year)
- Creative projects (engage and excite pupils with the work and link to other subjects)
- Responsible users (vital online safety units)
- Problem solving (pupils need to develop critical thinking independently to solve problems)
- 2.2. Implementation of Teaching and Learning

2.2.1.<u>Subject knowledge</u>

Within the Early Years class, it is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. Even if the new curriculum doesn't state computing objectives we feel it is important for the children's development though the school. This enables children to be ready for the challenges that lay ahead in Key Stage One and Two where the sequenced teachcomputing.org curriculum ensures progression and curriculum coverage.

2.2.2.<u>Planning</u>

Lessons are planned using the National Curriculum and school's Computing Skills Progression objectives. The planning documents allow adaptability of the teachcomputing.org units and embed our own key principles. A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T children, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities.

2.3. <u>Impact</u>

2.3.1.<u>Assessment</u>

Teachers regularly assess progress through observations and evidence. Key objectives to be assessed are taken from the National Curriculum to assess computing each term and this can be through Teacher App or through teacher notes and observations. Assessment sessions are designed at the end of a unit to assess knowledge and understanding can inform future provision. Work is often saved within the children's OneDrive account or through Assignments set in Teams.

2.3.2. Preparation for next stage of education

Pupils will be provided the opportunity to excel and produce high quality work which is essential for them as they move through their education; whether that be through the classes at this school or onwards onto future education at secondary school and beyond

3. Behaviour and Attitudes

3.1. Attitudes to learning

Pupils at GWPS have a great enthusiasm for the subject of computing and are happy, engaged learners eager to share their learning with adults, family and class peers. Through group collaboration we aim to provide opportunities for our pupils to appreciate how computing can reach those beyond their own school, pupils are able to mix, collaborate and work appreciate the views of others.

4. Personal development

4.1. Extended curriculum and wider outcomes





Next Review Date: September 2023 Signed:

We have had extended STEM ambassador support for this subject in the past and aim to renew this in the future now more volunteers are allowed back within the school. In addition, the computing lead and TA have been hosting a computing club one lunchtime a week.

4.2. Social, Moral, Spiritual, Cultural

Children will:

- Consider how to use computing socially with care
- Make responsible moral decisions and report any issues to the teacher or headteacher
- Understand and appreciate the changes in societal understanding of computing and technology

5. Leadership and management

5.1. <u>Roles and responsibilities</u>

Governing Body

The governing board will monitor the effectiveness of this policy and hold the headteacher to account for its implementation and will also ensure that:

- A robust framework is in place for setting curriculum priorities and aspirational targets.
- Enough teaching time is provided for pupils to cover the National Curriculum and other statutory requirements.
- Proper provision is made for pupils with different abilities and needs, including children with Special Educational Needs and Disabilities (SEND).
- The school implements the relevant statutory assessment arrangements.
- It participates actively in decision-making about the breadth and balance of the curriculum.
- It fulfils its role in processes to disapply pupils from all or part of the National Curriculum, where appropriate, and in any subsequent appeals.

<u>Leadership</u>

The headteacher is responsible for ensuring that this policy is adhered to, and that:

- All required elements of the Computing Curriculum, and additional provision which the school chooses to offer, have aims and objectives which reflect the aims of the school and indicate how the needs of individual pupils will be met.
- The amount of time provided for teaching the required elements of the curriculum is adequate and is reviewed by the governing board.
- Where appropriate, the individual needs of some pupils are met by permanent or temporary disapplication from all or part of the National Curriculum.
- They manage requests to withdraw children from non-statutory elements of the curriculum, where appropriate.
- The school's procedures for assessment meet all legal requirements.
- The governing board is fully involved in decision-making processes that relate to the breadth and balance of the curriculum.
- The governing board is advised on whole-school targets within the School Development Plan (SDP) in order to make informed decisions.
- Proper provision is in place for pupils with different abilities and needs including International New Arrivals (INA) and children with Special Educational Needs and Disabilities (SEND).

The computing lead will ensure that the school curriculum is implemented in accordance with this policy by:

- Monitoring in line with the school's Monitoring and Assessment Timetable.
- Attending and disseminating relevant continuing professional development (CPD) courses.
- Devising and implementing a subject specific action plan in line with the school's SDP.
- Sharing effective practice.

TOGETHER we are CARING, CONFIDENT and CREATIVE learners





Next Review Date: September 2023 Signed:

- Supporting staff, including Newly Qualified Teachers (NQTs).
- Raising the profile of and championing their subject within school and the wider school community.
- Analysis of data.
- <u>Staff</u>
- Will ensure this policy is adopted and followed
- Support children in their learning and adapt as necessary <u>Parents</u>
- Will support the school's endeavours of providing a high-quality computing curriculum
- Will contact the school if they have any issues, including any safeguarding online concerns Children:
- Alert staff to any issues, particularly keeping safe online
- Participate and be enthusiastic about their learning
- 5.2. Inclusion and equal opportunities

Teachers set high expectations for all pupils. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including: - More able pupils - Pupils with low prior attainment -Pupils from disadvantaged backgrounds - Pupils with SEN - Pupils with English as an additional language (EAL). Our whole school philosophy totally encompasses the equality of access and opportunity. Curriculum planning, teaching and learning and the behaviour strategies take into account pupil's age, aptitude, gender, ethnicity and special educational needs. The learning environment enables every pupil to fulfil their potential. The contribution all pupils make is acknowledged and valued. Pupils with emotional and/or physical needs who need individualised programmes with personal achievable targets and rewards are catered for and fully supported.

5.3. Safeguarding

The safety of children is paramount in all situations. Online safety is taught throughout the teachcomputing.org units and within specific annually completed units using the Cambridgeshire County Council PSHE scheme.

5.4. Health and safety

At all times a safe and healthy environment is maintained. Risk assessments are undertaken to ensure there is a safe working environment. Great Wilbraham CE Primary School is committed to safeguarding and promoting the welfare of all children. Any hazards and concerns are reported to the Headteacher or the Office. If equipment is no longer usable or issues arise then there is a booklet for staff to complete for our monthly technician visit. They can also be contacted via email for any immediate issues.

5.5. Reviewing and monitoring

Named Governors with responsibility for Computing will liaise with the subject leaders and monitor closely the way the school teaches Computing. The head teacher is responsible for the day-to-day organisation of the Computing curriculum. Computing lead will monitor the way that their subject is taught throughout the school through: - Lesson Observations; - Learning Walks; - Pupil Voice; - Analysis of data; - Planning Scrutinies; Work Scrutinies. In addition, they have responsibility for monitoring how resources are stored and managed.

6. Links to other policies

- 6.1. SEND Policy, SEND Information Report, SEND Offer
- 6.2. Equality Information and Objectives
- 6.3. Online Safety Policy
- 6.4. PHSE/SMSC Policy
- 7. Appendices

