

#### **Computing Framework**

The **Computing Framework** is a policy document that ensures a consistent, inclusive, and high-quality approach to the teaching and learning of Computing within the school. This outline adheres to the requirements of the 2014 National Curriculum in England and reflects guidance from the Department for Education (DfE), and is informed by Ofsted's framework for assessing education quality.

#### 1. Purpose and Vision

### 1.1 Aims of the Policy

- To establish the principles and expectations for high-quality Computing education, aligned with the National Curriculum (2014).
- To outline how Computing equips pupils with the knowledge, skills, and understanding they need to become competent digital citizens.
- To ensure Computing is delivered inclusively to meet the needs of all pupils, including those with SEND and those who are more able.

## 1.2 Vision for Computing

- Promote computational thinking and digital literacy to prepare pupils for living, learning, and working in a digital society.
- Provide pupils with opportunities to develop problem-solving, creativity, and criticalthinking skills.

Relevant Reference: DfE National Curriculum (2014) states that a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.

#### 2. Statutory Requirements

#### 2.1 National Curriculum Coverage

- Early Years Foundation Stage (EYFS): Reference to how Computing aligns with the EYFS Framework, particularly the 'Understanding the World' area of learning.
- Key Stages 1 and 2: A breakdown of National Curriculum Computing Programmes of Study (POS), including:
- Key Stage 1: Understanding simple algorithms, using technology purposefully, recognising IT in the world, and keeping safe online.
- Key Stage 2: Designing and debugging programs, understanding networks, using technology safely, responsibly, and securely.
  - Relevant Reference: The DfE National Curriculum in England: Computing Programmes of Study Key Stages 1 and 2 (2014).

### 2.2 Other Frameworks

 How the Computing curriculum supports whole school priorities (e.g., literacy, numeracy, and SMSC development).

### 3. Curriculum Intent, Implementation, and Impact

#### 3.1 Intent

- High-level goals for the Computing curriculum in terms of knowledge, skills, and understanding.
- A focus on the three main strands of Computing:
- a. **Computer Science**: Core programming skills and understanding algorithms.
- b. **Information Technology**: Proficiency using technology tools like word processing, spreadsheets, and multimedia.
- c. **Digital Literacy**: Safe, responsible, and critical use of IT, including e-safety.

#### 3.2 Implementation

- Overview of teaching and learning approaches, including:
- Integration of key curriculum strands.
- Use of practical, hands-on activities to complement theory.
- Differentiation strategies.
- Role of technology in supporting SEND students.
- Cross-curricular opportunities (e.g., using data analysis in Science and Geography).
- Delivery model:
- Timetabled Computing lessons.
- o Embedded use of technology in other curriculum subjects.
- Use of schemes of work, resources, and hardware.

#### 3.3 Impact

- How progress will be monitored and assessed against National Curriculum expectations.
- Methods for measuring Computing's contribution to pupil outcomes (e.g., development of computational thinking skills).
- Pupil voice and feedback mechanisms.

Relevant Reference: Ofsted's Education Inspection Framework prioritises a clear articulation of curriculum 'intent,' 'implementation,' and 'impact'.

# 4. Online Safety and Digital Safeguarding

### 4.1 Principles of Online Safety

- Embedding e-safety into the Computing curriculum.
- Providing pupils with an understanding of potential risks and teaching them how to use technology safely and responsibly.

### 4.2 Online Safety Policy Links

- Integration with the school's **Online Safety Policy** and the statutory guidance: "Keeping Children Safe in Education" (DfE, 2023).
- Clear guidelines for:
- Online bullying prevention.
- o Preventing radicalisation (alignment with the school's Prevent Duty obligations).

- Protecting pupils' personal data.
- o Responsible use of social media.

# **4.3 Safeguarding Staff and Parents**

- Ongoing CPD for staff to ensure awareness of the latest safeguarding risks.
- Engaging parents/carers through workshops and resources.

Relevant Reference: DfE's KCSIE (2023) and Education for a Connected World Framework (UKCIS, 2020).

## 5. Equality, Inclusion, and Accessibility

### **5.1** Accessibility for All

- Ensuring support for SEND pupils within Computing lessons, aligned with the Equality Act 2010.
- Access to adaptive technology and tailored resources.

### **5.2 Gender Balance and Representation**

- Addressing gender gaps, particularly in Computer Science uptake.
- Strategies to encourage under-represented groups to engage with Computing.

### 6. Staff Development

#### **6.1 Staff Training Needs**

- CPD opportunities to ensure all staff are confident delivering the Computing curriculum.
- Keeping staff informed of curriculum updates and developments in technology education.

#### 6.2 Non-specialist Support

Support and resources for non-specialist teaching staff.

#### 7. Assessment and Monitoring

#### 7.1 Forms of Assessment

- Ongoing formative assessment methods: questioning, observation, peer/self-assessment.
- Summative assessment methods: performance tasks, Computing portfolios, or digital projects.

### 7.2 Tracking and Reporting

- Use of tracking tools linked to National Curriculum objectives.
- Reporting progress to parents and governors.

#### 7.3 Role of Subject Leaders

• Subject leader's responsibilities for evaluating the quality of provision.

Relevant Reference: Ofsted EIF (2019) guidelines on curriculum monitoring.

### 8. Resources, Equipment, and Infrastructure

#### 8.1 Equipment Standards

- Ensuring the availability of technology (e.g., laptops, tablets, and coding devices).
- Maintenance of infrastructure and ensuring a safe IT environment.

#### 8.2 Software and Platforms

Approved software and digital tools to support learning outcomes.

• Considerations for safeguarding when selecting tools.

## 8.3 Sustainable Use of Technology

• Promoting environmentally responsible practices in the use of technology.

## 9. Parental Engagement and Community Links

### **9.1 Involving Parents**

- Ensuring parents are aware of the Computing curriculum and its importance.
- Providing guidance for supporting their children's learning at home.

## 9.2 Community Collaboration

• Participation in national events such as Safer Internet Day and National Coding Week.

# **10. Policy Review**

• An outline of how and when the Computing Framework will be reviewed. (E.g., every two years by the Governing Body).

### **Policy Review**

- This policy will be reviewed every [ 2 years] to ensure alignment with DfE and Ofsted updates and school priorities.
- Feedback will be sought from stakeholders, including pupils, staff, and parents, to inform future revisions.

Approved by: [headteacher or governing body name]
Last reviewed on: [insert date]