

*St Luke's CE (Aided) Primary School*

# ***St. Luke's C.E (Aided) Primary School***



## **Computing Policy 2021-2022**

## Computing

Date	Review Date	Subject Leader	Nominated Governor
Feb 2021	Feb 2022	Mrs C Cushing	Rev P Stanley

### Updated Pages

We believe this policy should be a working document that is fit for purpose, represents the school ethos, enables consistency and quality across the school and is related to the following legislation:

- Education Act 1996
- Education Act 1997
- Standards and Framework Act 1998
- Education (National Curriculum) (Temporary Exceptions for Individual Pupils) (England) Regulations 2000
- Education Act 2003
- Equality Act 2010

The following documentation is also related to this policy:

- Teaching a broad and balanced curriculum for education recovery' (DfE 2021)
- The Education Inspection Framework (Ofsted 2021)
- An investigation into how to assess the quality of education through curriculum intent, implementation and impact (Ofsted 2018)
- Designing and Timetabling the Primary Curriculum - a practical guide for Key Stage 1 and 2 (Qualifications and Curriculum Authority 2002)
- Equality Act 2010: Advice for Schools (DfE)
- The National Curriculum in England Framework Document (DfE) 2014
- Race Disparity Audit - Summary Findings from the Ethnicity Facts and Figures Website (Cabinet Office)

We believe that 'computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. 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.' (The National Curriculum in England Framework Document (DfE) 2014)

We have a duty to ensure compliance with the revised National Curriculum and with the application of the new programmes of study and attainment targets. We understand that 'the

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National Curriculum provides pupils with an introduction to the core knowledge that they need to be educated citizens.'

Our well-balanced curriculum promotes the spiritual, moral, social, emotional, cultural, mental and physical development of pupils and prepares them for the opportunities, responsibilities and experiences of later life. We will develop pupils' spoken language, reading and writing in all subjects and will develop pupils' mathematical fluency.

We strive to provide a curriculum that all pupils will find enjoyable with them understanding the relevance of their lessons. This can only be achieved by using the experience, enthusiasm and specialism of individual teachers who provide interesting, relevant, purposeful and differentiated lessons based on real-life experiences, wherever possible, in a structured well-ordered classroom environment.

We believe all pupils and other members of the school community have an entitlement to safe Internet access at all times.

We have a duty to safeguard children, young people and families from violent extremism. We are aware that there are extremists groups within our country who wish to radicalise vulnerable children and to involve them in terrorism or in activity in support of terrorism. Periodic risk assessments are undertaken to assess the risk of pupils being drawn into terrorism. School personnel must be aware of the increased risk of online radicalisation, and alert to changes in pupil's behaviour. Any concerns will be reported to the Designated Safeguarding Lead.

We are aware that under the 'Counter-Terrorism and Security Act 2015' we have the duty to have 'due regard to the need to prevent people from being drawn into terrorism'. This duty is known as the Prevent duty and we believe it is essential that school personnel are able to identify those who may be vulnerable to radicalisation or being influenced by extremist views, and then to know what to do when they are identified.

We provide a safe environment where we promote pupils' welfare. Within this environment we work hard to build pupils' resilience to radicalisation and extremism by promoting fundamental British values and for everyone to understand the risks associated with terrorism. We want pupils to develop their knowledge and skills in order to challenge extremist views.

Annually we undertake a subject evaluation that is based on the following questions:

- How do we design and provide a curriculum that is broad and balanced for all pupils? (Curriculum Intent)
- How do we deliver our curriculum through teaching, assessment and feedback? (Curriculum Implementation)
- How do we assess pupil achievement through external tests/exam results and by our own school data? (Curriculum Impact)

We wish to work closely with the School Council and to hear their views and opinions as we acknowledge and support Article 12 of the United Nations Convention on the Rights of the Child that children should be encouraged to form and to express their views.

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We as a school community have a commitment to promote equality. We believe this policy is in line with the Equality Act 2010.

We all have a responsibility to ensure equality permeates in to all aspects of school life and that everyone is treated equally irrespective of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. We want everyone connected with this school to feel safe, secure, valued and of equal worth.

We believe it is essential that this policy clearly identifies and outlines the roles and responsibilities of all those involved in the procedures and arrangements that is connected with this policy.

### **Aims**

- To ensure that all pupils can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- To ensure that all pupils can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- To ensure that all pupils evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- To ensure that all pupils are responsible, competent, confident and creative users of information and communication technology.

(The National Curriculum in England Framework Document (DfE) 2014)

- To promote the teaching of numeracy and literacy within all subjects.
- To evaluate the school curriculum by focusing on curriculum intent, implementation and impact.
- To protect children from the risk of radicalisation and extremism.
- To ensure compliance with all relevant legislation connected to this policy.
- To work with other schools and the local authority to share good practice in order to improve this policy.

### **Roles and Responsibility for the Policy**

#### **Role of the Governing Body**

The Governing Body has:

- appointed a member of staff to be responsible for the curriculum leadership of Computing;
- delegated powers and responsibilities to the Headteacher to ensure all school personnel and stakeholders are aware of and comply with this policy;
- responsibility for ensuring compliance with the legal requirements of the National Curriculum;
- responsibility for ensuring that the school complies with all equalities legislation;

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- nominated a designated Equalities link governor to ensure that appropriate action will be taken to deal with all prejudice related incidents or incidents which are a breach of this policy;
- responsibility for ensuring funding is in place to support this policy;
- responsibility for ensuring this policy and all linked policies are maintained and updated regularly;
- responsibility for ensuring all policies are made available to parents;
- nominated a link governor to:
  - visit the school regularly;
  - work closely with the Headteacher and the coordinator;
  - ensure this policy and other linked policies are up to date;
  - ensure that everyone connected with the school is aware of this policy;
  - report to the Governing Body every term;
  - annually report to the Governing Body on the success and development of this policy.
- responsibility for the effective implementation, monitoring and evaluation of this policy.

### **Role of the Headteacher**

The Headteacher will:

- work in conjunction with the Senior Leadership Team to ensure all school personnel, pupils and parents are aware of and comply with this policy;
- ensure teachers:
  - 'have good knowledge of the subject(s) and courses they teach;
  - have effective support for those teaching outside their main areas of expertise;
  - present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching;
  - check learners' understanding systematically, identify misconceptions accurately and provide clear, direct feedback and in doing so, they respond and adapt their teaching as necessary, without unnecessarily elaborate or differentiated approaches;
  - design their teaching to help learners to remember in the long term the content they have been taught and to integrate new knowledge into larger concepts;
  - use assessment well in order to help learners embed and use knowledge fluently or to check understanding and inform teaching;
  - create an environment that allows the learner to focus on learning;  
(Amended from the 'Education Inspection Framework' (Ofsted 2021))
- work closely with the curriculum leader, subject leaders and the link governor;
- ensure compliance with the legal requirements of the National Curriculum;
- consider disapplying a pupil from all or part of the National Curriculum for a period of time if this will benefit the child;
- encourage parents to take an active role in curriculum development;
- provide leadership and vision in respect of equality;
- provide guidance, support and training to all staff;

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- monitor the effectiveness of this policy by;
  - planning scrutinies and work trawls
- annually report to the Governing Body on the success and development of this policy.

#### **Role of the Curriculum Leader**

The Curriculum Leader will:

- provide strategic leadership and direction;
- provide a curriculum that provides pupils with the essential knowledge they need to be educated citizens in democratic Britain;
- coordinate a number of working parties in order to explore ways of improving the curriculum and the way in which we deliver it with a view of ensuring the highest standards of delivery and consistency in pupil's learning and teaching experiences and opportunities throughout the school;
- provide an environment that is fun, stimulating and challenging to all pupils;
- promote an awareness of and respect for a diversity of cultures, values, beliefs and abilities;
- equip children with a range of skills and a desire for lifelong learning;
- ensure appropriate coverage of the curriculum;
- provide support and advice;
- monitor pupil progress;
- ensure sufficient and up to date resources are in place.

#### **Role of the Subject Leader**

The Subject Leader will:

- lead the development of this policy throughout the school;
- work closely with the Headteacher, curriculum leader, the nominated governor and SENCO;
- be accountable for standards in this subject area;
- monitor standards by;
  - auditing the subject area
  - review of the scheme of work
  - monitoring teachers planning
  - scrutinising children's work
  - discussions with pupils
- work in conjunction with the Headteacher, Senior Leadership Team, Subject Leaders, teaching and support personnel to provide statements on each of the following:

We ...	Evidence
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<b>Intent</b>	<ul style="list-style-type: none"> <li>▪ have constructed a 'curriculum that is ambitious and designed to give all learners the knowledge and cultural capital they need to succeed in life' by ensuring a range of skills and knowledge are taught using a range of programs provided by Purplemash.</li> </ul>	Long term plan
	<ul style="list-style-type: none"> <li>▪ provide a curriculum that is 'coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment' by ensuring progression of skills and knowledge across all year groups.</li> </ul>	Long term plan and progression of skills document
	<ul style="list-style-type: none"> <li>▪ have the 'same academic, technical or vocational ambitions for almost all learners and we have designed an ambitious curriculum to meet the needs of some learners with high levels of SEND' by differentiated lessons, where needed, to meet the needs of pupils.</li> </ul>	Planning
<b>Implementation</b>	<ul style="list-style-type: none"> <li>▪ ensure 'teachers have good knowledge of the subject(s) and courses they teach' through training from The National College and Purplemash.</li> </ul>	Training records
	<ul style="list-style-type: none"> <li>▪ provide 'effective support for those teaching outside their main areas of expertise' by providing support from the co-ordinator and training from Purplemash.</li> </ul>	Training records
	<ul style="list-style-type: none"> <li>▪ ensure 'teachers present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching'</li> </ul>	Lesson plans
	<ul style="list-style-type: none"> <li>▪ ensure teachers 'check learners' understanding systematically, identify misconceptions accurately and provide clear, direct feedback' through questioning and discussions in lessons.</li> </ul>	Lesson plans
	<ul style="list-style-type: none"> <li>▪ ensure teachers 'respond and adapt their teaching as necessary, without unnecessarily elaborate of differentiated approaches by annotating plans.</li> </ul>	Lesson plans
	<ul style="list-style-type: none"> <li>▪ ensure 'over the course of study, teaching is designed to help learners to remember in the long term the content they have been and to integrate new knowledge into larger concepts' by long term planning revisiting software and developing on skills from previous years.</li> </ul>	Long term plan

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	<ul style="list-style-type: none"> <li>ensure assessment is used well in order to 'help learners embed and use knowledge fluently or to check understanding and inform teaching' by questioning in lessons and annotating plans and providing feedback to pupils about their work.</li> </ul>	Marking on purplemash and annotating of lesson plans.
	<ul style="list-style-type: none"> <li>ensure 'teachers create an environment that allows the learner to focus on learning' by making sure children behave well and the classroom is orderly for children to concentrate on their work.</li> </ul>	Lesson observations
	<ul style="list-style-type: none"> <li>ensure 'the resources and materials that teachers select reflect the provider's ambitious intentions for the course of study and clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment' by the use of Purplemash resources.</li> </ul>	Long term plan
<b>Impact</b>	<ul style="list-style-type: none"> <li>ensure 'learners develop detailed knowledge and skills across the curriculum and, as a result, achieve well' by planning for the development of a range of skills and knowledge using a range of software.</li> </ul>	Long term plan
	<ul style="list-style-type: none"> <li>ensure 'learners are ready for the next stage of education, employment or training' by ensuring they use a range of software and assessing against the National Curriculum milestones using Depth of Learning.</li> </ul>	Long term plan and Depth of Learning

(Quotes taken from the Education Inspection Framework (Ofsted 2021))

- ensure continuity and progression throughout the school;
- devise a subject improvement plan;
- provide guidance and support to all staff;
- provide training for all staff on induction and when the need arises regarding;
- attend appropriate and relevant INSET;
- keep up to date with new developments;
- undertake an annual audit and stock take of resources;
- purchase new resources when required and in preparation for the new academic year;
- manage the subject budget effectively;
- undertake risk assessments when required;
- review and monitor;
- annually report to the Governing Body on the success and development of this policy.

**Role of Teachers**

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Teachers will:

- comply with all aspects of this policy;
- work closely with the subject leader to develop this policy;
- devise medium and short term planning;
- develop mathematical fluency, numeracy and mathematical understanding in all subjects;
- develop pupils' spoken language, reading, writing and vocabulary in all subjects;
- plan and deliver good to outstanding lessons;
- plan differentiated lessons which are interactive, engaging, of a good pace and have a three part structure;
- have high expectations for all children and will provide work that will extend them;
- assess, record and report on the development, progress and attainment of pupils;
- achieve high standards;
- celebrate the success of pupils in lessons
- implement the school's equalities policy and schemes;
- report and deal with all incidents of discrimination;
- attend appropriate training sessions on equality;
- report any concerns they have on any aspect of the school community.

### **Role of Pupils**

Pupils will:

- be aware of and comply with this policy;
- be encouraged to work in partnership with the school by making decisions and exercising choice in relation to their educational programme;
- listen carefully to all instructions given by the teacher;
- ask for further help if they do not understand;
- participate fully in all lessons;
- participate in discussions concerning progress and attainment;
- treat others, their work and equipment with respect;
- support the Golden Expectations and guidance necessary to ensure the smooth running of the school;
- liaise with the school council;
- take part in questionnaires and surveys.

### **Role of Parents/Carers**

Parents/carers will:

- be aware of and comply with this policy;
- be encouraged to take an active role in the life of the school by attending parent-teacher consultations
- be informed via the class pages of the school website/ curriculum section of the school website of their child's topics;
- asked to provide suggestions and ideas for improving this subject;

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- be asked to take part periodic surveys conducted by the school on curriculum development;
- encourage effort and achievement;
- encourage completion of homework and return it to school;
- provide the right conditions for homework to take place;
- expect their child to hand in homework on time;
- join the school in celebrating success of their child's learning.

### **Policy Procedure**

### **Teaching and Learning Style**

We use a variety of teaching and learning styles in order to develop children's knowledge, skills and understanding.

### **Curriculum Planning and Organisation**

Teachers collaborate on the planning of the subject to ensure parity in provision and to share expertise. Curriculum planning is managed in three phases namely:

#### **Long Term Planning**

- details what is to be taught over the year;
- provides teaching guidelines and overall objectives for each year group for the whole year.

#### **Medium Term Planning**

- organises the subject into termly or half-termly sections;
- is more detailed and the objectives are more specific in nature;
- is developed by the teachers, who respond to the needs of their pupils;
- ensures a balanced distribution of work is undertaken across each term.

#### **Short Term Planning**

- details the subject curriculum over the week;
- plans lessons in detail with specific class objectives;
- sets individual learning goals for each pupil.

### **Inclusion**

We believe that we are an educationally inclusive school as we are concerned about the teaching and learning, achievements, attitudes and well-being of all our pupils. We aim to provide places for all pupils who express a preference to join this school.

We work hard to offer equality of opportunity and diversity to all groups of pupils within school such as children:

- from both sexes;
- who have Special Educational Needs;

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- who are looked after;
- from minority faiths, ethnicities, travelers, asylum seekers, refugees;
- who are gifted and talented;
- who are at risk of disaffection;
- who are young carers;
- who are sick;
- who have behavioural, emotional and social needs;
- from families who are under stress.

We believe we have a duty to ensure that all children have equal rights to the opportunities offered by education and that all children will be encouraged to fulfil their potential in their academic, physical and creative achievements.

We want to give all children the right to access high quality educational experiences, to take part in a broad and balanced curriculum and to be part of the social life of the school.

We recognise that within the school we have more able, gifted and talented children. We believe that:

- more able children demonstrate a higher ability than average for the class and often require differentiated tasks and opportunities to learn through challenges;
- gifted children are those who have the ability to do well in more than one subject;
- talented children demonstrate an innate talent or skill in creative, cultural or sporting fields.

We have an even greater obligation to plan and deliver well-structured lessons with appropriate assessment plus ambitious targets for pupils who have low levels of prior attainment or come from disadvantaged backgrounds.

Also, we have a duty to cater for pupils whose first language is not English by planning teaching opportunities to help them develop their English and to gain full access to the National Curriculum.

### **Differentiation**

Differentiation is best defined as 'the process by which differences between learners are accommodated so that all students in a group have the best possible chance of learning.' (Geoff Petty)

The main purpose of differentiation is to challenge and raise standards of learning by ensuring that curriculum objectives are accessible to all our children despite their backgrounds or abilities. We see differentiation as a form of integration and not exclusion.

Differentiation must reflect the learning objective and can be achieved in a variety of ways either by task, by support or by outcome and should be chosen by fitness for purpose.

We want all children to achieve success, therefore we will ensure they are given differentiated tasks that are matched to their level of attainment so that they can demonstrate successfully what they know, understand and can do.

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The main feature of effective differentiation is good planning resulting in effective teaching and learning with children making good progress. Also we expect to see in all classes interested well motivated children responding to challenges, children working productively on task and being aware of their own progression.

### **Special Educational Needs**

We want pupils with identified special educational needs to have full access to all subjects of the National Curriculum with teachers planning lessons that have no barriers to pupils achieving and with appropriate targets relating to the subject.

### **Assessment for Learning**

Teachers will:

- carry out continuous assessment;
- use short-term assessments matched to the teaching objectives to adjust their planning;
- make comments on pupil's work on Purplemash and in books related to the teaching objective;
- carry out medium-term assessments to measure progress against key objectives to adjust planning;
- carry out long-term assessment to assess progress against school and national targets;
- administer national tests and assessment in Y2 and Y6;
- carry out tests at the end of Y3, Y4 and Y5;
- use long-term assessments to help them plan for the next academic year;
- inform parents and carers of their child's progress and targets.

### **Monitoring and Review of the Subject**

Monitoring of standards of children's work and the quality of teaching is the responsibility of the subject coordinator supported by the Headteacher and the SLT.

Standards will be monitored by:

- looking at pupils work
- pupil discussions
- audit of subjects
- scrutiny of planning
- general curriculum discussions

### **Contribution of the Subject to other Areas of the Curriculum**

Computing is linked to mathematics, science, art, English and design and technology.

### **Resources**

The school has a full range of resources to support the teaching of this subject throughout all year groups. Resources are upgraded and replenished when the need arises. An annual

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stock take and audit is undertaken by the subject coordinator in the summer term in preparation for the next academic year.

#### **Raising Awareness of this Policy**

We will raise awareness of this policy via:

- School website;
- Meetings with parents such as parent-teacher consultations;
- Meetings with school personnel;
- Headteacher reports to the Governing Body;

#### **Training**

We:

- have in place appropriate training for this policy that is undertaken by a registered training provider that covers:
  - All aspects of this policy
  - National Curriculum programmes of study and attainment targets for all subjects
  - teaching and learning
  - planning
  - assessment
  - key skills
  - Equal opportunities
  - Inclusion
- ensure the content of all training is correct, delivered well and engages staff as we believe that the more engaging training is, the better the outcomes that we need to measure;

#### **Equality Impact Assessment**

Under the Equality Act 2010 we have a duty not to discriminate against people on the basis of their age, disability, gender, gender identity, pregnancy or maternity, race, religion or belief and sexual orientation.

This policy is in line with the Equality Act 2010 as it is fair, it does not prioritise or disadvantage any pupil and it helps to promote equality at this school.

#### **Race Disparity Audit**

We acknowledge the findings of the Race Disparity Audit that clearly shows how people of different ethnicities are treated across the public services of health, education, employment and the criminal justice system.

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The educational section of the audit that covers: differences by region; attainment and economic disadvantage; exclusions and abuse; and destinations, has a significant importance for the strategic planning of this school.

#### **Monitoring the Implementation and Effectiveness of the Policy**

The practical application of this policy will be reviewed annually or when the need arises by the coordinator, the Headteacher and the nominated governor.

A statement of the policy's effectiveness and the necessary recommendations for improvement will be presented to the Governing Body for further discussion and endorsement.

#### **Linked Policies**

- Curriculum
- Equality and diversity
- E-safety
- Special Educational Needs
- Teaching and Learning

We believe this school policy:

- is an essential part of the school;
- supports staff in managing certain situations;
- forms an important framework that will ensure consistency in applying values and principles throughout the establishment;
- provides guidance, consistency, accountability, efficiency, and clarity on how the school operates;
- provides a roadmap for day-to-day operations;
- ensures compliance with laws and regulations, gives guidance for decision-making, and streamlining internal processes;
- is designed to influence and determine all major decisions, actions and all activities taking place within the boundaries set by them;
- stems from the school's vision and objectives which are formed in strategic management meetings.

#### **Addendum**

We acknowledge the recent DfE non-statutory guidance 'Teaching a broad and balanced curriculum for education recovery' which offers suggestions:

- to teachers and leaders in reception and key stages 1 to 3;
- to help decide how to prioritise elements within their curriculum for education recovery;
- based on the good practice evident in many schools;
- to continue to teach a broad and balanced curriculum in all subjects including what pupils learn from educational visits and visitors to the school;

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- to prioritise teaching missed content that will allow pupils to make sense of later work in the curriculum which includes key knowledge, skills, vocabulary, concepts and the links between concepts;
- to take a subject-specific approach when prioritising what to teach;
- that when making curriculum adjustments they should be informed by:
  - an understanding of the critical content for progression in each subject;
  - what pupils do and do not know.
- that questioning and discussion will reveal pupils gaps, misconceptions and insecure knowledge, so that effective learning can be implemented.

(Amended from 'Teaching a broad and balanced curriculum for education recovery' (DfE 2021))

We understand that we should focus on:

- any missed knowledge that is crucial for pupils' next steps which will be important in hierarchical aspects such as:
  - programming;
  - algorithms;
  - understanding computers;
  - data.
- using computing devices safely and responsibly although this will depend on pupils' previous exposure to and experience of technology.

Key stage 1   ▪ Focus is on:

- developing pupils' knowledge of algorithms, notably sequencing in key stage 1.

Key stage 2   ▪ Focus is on

- sequencing, selection and repetition;
- giving enough time to pupils to practice programming to secure knowledge of key programming constructs.
- identifying gaps in knowledge of how to use digital devices and how this is addressed;
- ensuring pupils use devices confidently and competently so that they can focus on complex tasks without also having to learn how to use a device, which may otherwise get in the way of processing information.

(Amended from 'Teaching a broad and balanced curriculum for education recovery' (DfE 2021))