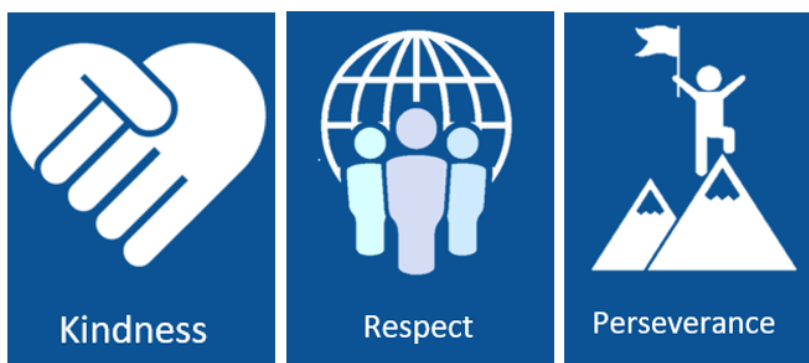


Ditchling (St. Margaret's) CE Primary and Nursery School

Computing



'Living life in all its fullness' John 10:10

Version	Reviewed by	Approved by	Date Approved	Next Review Date
1	Ditchling developed Policy	Head/FGB	Dec 2024	Dec 2025

Signed: Chair of Governors



Signed: _Headteacher



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1. Curriculum Statement

Our aim is to give children a thorough and ambitious education in computing, equipping them to use technology, computational thinking and creativity to understand and change the world. It is now more important than ever that children are able to use technology positively, responsibly and safely, and that they see good models of this.

By the time they leave Ditchling, children will have gained key knowledge and skills in the three main strands of the National Curriculum for Computing (2014): computer science (programming and understanding how digital systems work), information technology (using computer systems to create, store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). Furthermore, from Nursery to Year 6, experiences in computing and the wider curriculum are planned to develop children's computational thinking skills.

Our knowledge-engaged curriculum enables children to understand how computers and computer systems (such as the internet) work, and how they are designed and programmed. It ensures they know what to do if they have concerns about anything they encounter online, and how to be safe, responsible and respectful when using the internet. Equally, our offer provides many opportunities for learners to apply their evolving knowledge imaginatively, becoming fluent and creative in their mastery of computing. The depth and breadth of our coverage aims to provide all our children with a solid grounding for future learning and the ability to become active digital citizens in the modern world.

At Ditchling, teachers use specified units from the highly endorsed 'Teach Computing' scheme, published by NCCE (National Centre for Computing Education), as a starting point for the planning of their computing lessons. The key knowledge and skills that must be taught within each unit have been identified and carefully mapped to support the progression of children's learning across the primary phases, building towards mastery of the end of key stage objectives from the National Curriculum. Freedom for teachers to develop and adapt computing units within the framework of the progression map leads to rich links with engaging contexts in other subjects and topics, while still ensuring systematic coverage of objectives.

Teachers support the children and scaffold this knowledge as appropriate, according to the children's age group, as well as individual needs. This process is used to further consolidate the key knowledge of the topic.

To secure thorough understanding of online safety we use Project Evolve as an approach to further enhance our online safety offer.

Our computing progression framework ensures a balanced coverage of the three computing strands (computer science, information technology and digital literacy). The children work on all three strands each year. As they progress through the school, children build on their prior learning within each strand, covering new or deeper knowledge and developing their technical skills. Within all sequences of lessons, teachers plan a phase of progressive questioning which extends to and promotes the higher order thinking of all learners. Questions initially focus on the recall or retrieval of knowledge, and help to scaffold computational thinking skills, such as pattern recognition. Questions then extend to promote application of the knowledge in a new situation and are designed to promote independence in analytical thinking.

The relevant, context-embedded computing experiences through which our knowledge-engaged curriculum is taught, will benefit learners in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and computational and critical thinking, computing at Ditchling gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.

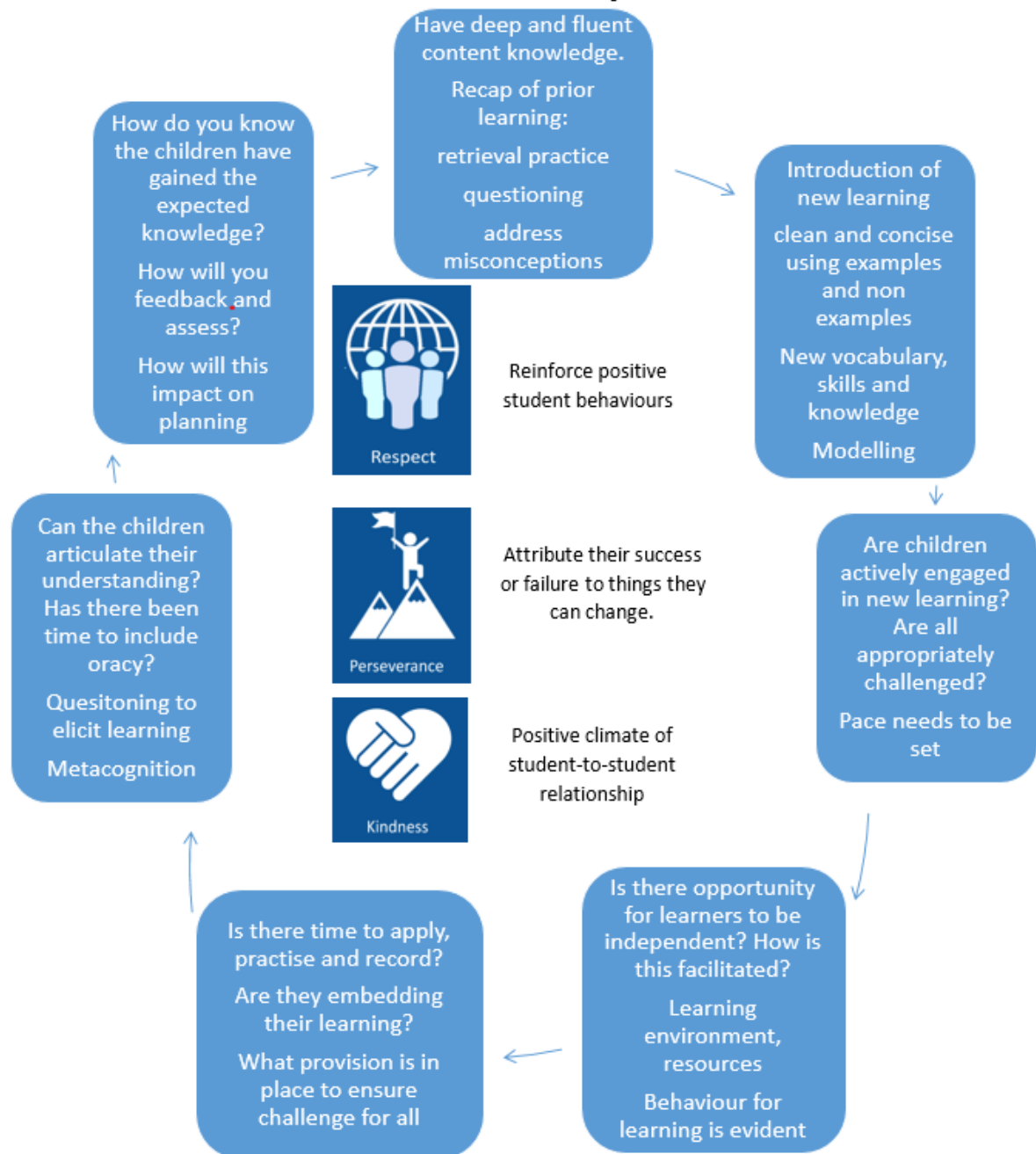
2. Teaching and Learning

As part of the introduction to each new Computing topic, teachers review what the children know already and identify what children would like to learn, to inform the programme of study so that it takes account of children's interests. A working wall will be used to support and celebrate learning, throughout each unit of work and this will also be used to support the acquisition of key knowledge and the accurate use of key vocabulary.

Lessons are planned to ensure that key knowledge is developed over time over the course of each Computing block and in the correct sequence. Key knowledge is reviewed by the children and rigorously checked and consolidated by the teacher at the end of each unit of work as part of the school's assessment of Computing. Lessons within each unit are also planned to ensure the systematic development of the key identified skills across the school.

Teaching and Learning at Ditchling

Based on the Great Teaching Toolkit



3. Assessment

Children's existing knowledge of the topic and the key related knowledge from previous year groups, is checked at the beginning of each unit.

Assessment for learning is continuous throughout the planning, teaching and learning cycle. Assessment is supported by use of the following strategies:

- Observing children at work, individually, in pairs, in a group and in class during whole class teaching.
- Using differentiated, open-ended questions that require children to explain and unpick their understanding.
- Providing effective feedback, to which recognises successful aspects of the children's work, as well as informing subsequent dialogue to address errors and misconceptions.
- Book moderation and monitoring of outcomes of work, to evaluate the range and balance of work and to ensure that tasks meet the needs of different learners (with the acquisition of the pre-identified key knowledge of each topic being evidenced through the outcomes).
- Child and teacher review of both the agreed success criteria at the end of each lesson and the key knowledge at the end each unit, to inform focused consolidation where this is necessary.

There is a strong focus on developing the quality, presentation and content of children's written work across all subjects through our 'Beautiful books' standards. The standard of children's writing is expected to be the same high standard across all subjects – teachers marking will address inaccuracies (such as, for example, inconsistencies in the use of capital letters and punctuation). It will also prompt when handwriting and grammar needs improvement, indicating an identified target and providing a suitable model where appropriate.

Although there will not always be a recorded outcome in children's books, task will be planned that provide plenty of opportunity for children to demonstrate the application of the key knowledge, skills and vocabulary for the lesson.

4. Planning and Resources

Lesson slides are designed to be accessible to all children, as well as to avoid cognitive overload. Lesson slides are used by the teacher to support the teaching, as well as to convey key information and instruction to the children. Teachers devise lesson slides according to what is stated on the progression map for Computing according to the term and year group.

Teachers use the resources from Teachcomputing and Project Evolve (for online safety) to help deliver the curriculum. The key vocabulary for each topic is mapped and shared with the children using Widget. Our classroom displays present this vocabulary for Computing

The Computing curriculum is designed to ensure that all pupils have a high quality, coherent and progressive experience of the subject. The school's Computing knowledge and skills mapping is informed by Teachcomputing and Project Evolve.

When planning, teachers ensure that teaching and learning activities provide a suitable level of challenge for all learners, with appropriate task adaptation where necessary. Lesson slides and resources are saved in the schools shared planning drive as a central resource. Not all lessons will be planned to have a written outcome, but the lesson slides of lessons without a recorded outcome will indicate the key knowledge and skills covered and how these were taught, including what the children did.

Accompanying artefacts are maintained and replenished by the subject leader. The topic boxes are in a separate room and are easily accessible to teachers, along with a wide range of books to support and enhance teaching.

5. Organisation

The Computing Knowledge and Skills Progression Map outlines the key knowledge for each unit and how these progress throughout the programme of study, as well as identified and planned cross-curricular links and opportunities for learning outside the classroom.



6. EYFS

In EYFS, pupils should be taught to:

- Follow instructions as part of practical activities and debug if things go wrong.
- Experiment with programming a robot such as BeeBot.
- Give simple instructions.
- Operate a camera to take photos.
- Recognise a range of technology in home and school.
- Know what a keyboard and mouse is.
- Use a simple paint tool to create digital art.
- Begin learning some rules to follow to keep us safe online.
- Know what to do if they come across something that worries them or makes them feel uncomfortable.

7. KS1 and KS2

Computing Education in KS1 and KS1 is enriched by the school's community links, which enables access to local places and visitors. The school also works closely with Hurstpierpoint College to look for opportunities for enrichment activities.

Children's work in books will mostly be their own recorded writing. Pages of scaffolded work will only be stuck into children's books when this is absolutely necessary. In some instances, children might stick a diagram or visual into their books that they will label or respond to into their books, rather than completing the entirety of an outcome on a separate sheet which is then stuck in. In Computing, it might be appropriate for children to record a learning or practice onto a provided format. However, the majority of children will record their work directly onto the pages of their book, using the layout provided as a point of reference. This will enable greater ownership and pride in recorded outcomes.

8. Equal Opportunities

Ditchling School will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others through our school values of kindness and respect. All pupils have equal access to Computing and all staff members follow the equal opportunities policy. Resources for SEN children and children who are working at greater depth are made available to support and challenge appropriately.

9. Inclusion

Children with English as an additional language: It is vital that children who have English as an additional language have English modelled accurately by all staff at school. Collaborative work with peers (where English is their first language) is essential and EAL children are provided with consistent opportunities for this verbal interaction. Dual language books are available for each class (available from the Inclusion Department) and each classroom has a display key words associated with current 11 topics being studied. All teachers include a range of strategies to support children with EAL which includes: teacher and peer modelling and consistent use of visual support, repetition and recasting of language features, word banks and scaffolded speaking and listening activities. Teachers work with the Inclusion Coordinator to best meet the needs of individuals within their classes. Children who are new to English are assessed and support is put in place by the Inclusion team to help them make rapid progress. In addition, class teachers deploy teaching assistants to provide targeted support and the use of home language support and peer-buddying is encouraged. Assessment data is used to inform and allocate appropriate intervention, including speech and language groups. The school will also support EAL children and their families through drop in sessions for parents and carers, in line with the inclusion policy. Special Educational Needs Class teachers inform the SENDCO and Inclusion Department if they are concerned that a child may have underlying learning difficulties. Support for children with identified SEN includes the following, as appropriate:

- Volunteer readers
- Reading buddies
- Language groups
- Social skills groups
- Booster classes
- Toe by Toe
- Get Spelling scheme
- One-to-one RWI (see SEN policy for further details).

10. Role of the Subject Leader

The role of the subject leader in Computing is to coordinate the teaching of Computing across all phases of the school. This is in order to secure high quality literacy provision for every child, including outstanding Computing teaching and learning, effective use of resources and the highest standards of achievement for all.

Key duties that the Computing subject leader will undertake over the course of the year include:

- Monitoring of Computing books and folders online.
- Learning walks and participation in lesson observations
- Planning and organising Computing enrichment opportunities and competitions
- Helping identify and facilitate the professional development needs of staff
- Liaising with SLT to implement school improvement priorities and report on actions, progress and impact
- Liaising with the school Inclusion Lead to best support children experiencing difficulty in Computing
- Organising, maintaining and cataloguing resources
- Keeping abreast of new initiatives in Computing teaching, including attendance of borough forums and dissemination of key content.

Lesson slides and outcomes for each unit of work will be monitored by the SLT, in collaboration with subject and phase leaders. This will inform any necessary follow-up 12 action and support, to ensure that school systems are consistent across year groups, age phases across the school throughout the curriculum. This is part of the school's commitment to ensuring a high quality, broad and stimulating curriculum.

Regular opportunities will be provided throughout the year for moderation of children's achievement, according to the programme of study for their year group. The subject leader will use the outcomes of this process to support further development in Computing, as well as the findings from regular book looks (where teachers across year groups will view outcomes of work in each subject). The book look process itself will provide an opportunity to recognise, celebrate and disseminate good practice, and inform judgements as to the progress being made towards identified whole school and subject priorities. Wherever possible, models and that the children have created will be seen as part of this process. In-house moderation and Book looks will be scheduled to take place within teachers' directed time.

11. Parents and Carers

We recognise how crucial the home/school link is for supporting children to have the highest standards of achievement in Computing. At the 'Meet your teacher' meeting at the beginning of every academic year, the Computing standards of the year group are explained, as well as further meetings throughout the year to support parents to understand the curriculum. Home Learning is not expected in Computing but there are often links to Computing in the optional 'Home Learning Projects' undertaken by KS2.