

Computing Policy

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<u>Vision</u>

Computing lessons at Belle Vue encourage creativity, resourcefulness and innovation to prepare children "to understand and change the world" (National Curriculum, 2013). As a school, we embrace the national vision for Computing and appreciate that, to achieve this, pupils must have access to a curriculum which is 'balanced and broadly based'.

At Belle Vue, our Computing curriculum prepares children to thrive in our ever-changing, technologically rich world. We provide an exciting, relevant and challenging Computing curriculum for all pupils which will enthuse and equip children with the capability and confidence to use technology effectively throughout their lives.

Children at Belle Vue will be provided with a wealth of opportunities to instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources. This will allow our children to establish firm roots, equipping them with the knowledge, skills and understanding to be positive, contributing, responsible global citizens, ready to prosper in a diverse world.

We strive to achieve this aim by:

- supporting all children in using technology with purpose and enjoyment
- Meeting, and building on the minimum requirement set out in the National Curriculum as fully as possible and helping all children to achieve the highest possible standards of achievement
- Helping all children to develop the underlying skills and capability which is essential to developing Computing capability (such as problem solving, perseverance, learning from mistakes) and apply them elsewhere
- helping all children to develop the necessary skills to exploit the potential of technology and to become autonomous and discerning users

- helping all children to evaluate the benefits and risks of technology, its impact on society and how to manage their use of it safely and respectfully.
- using technology to develop partnerships beyond the school
- celebrating success in the use of technology.

Computing Curriculum

At Key Stages 1 and 2, the planning, organisation and delivery of the Computing curriculum is supported by the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work allows us to deliver fun and engaging lessons which help to raise standards, follow a clear progression of skills and allow all pupils to achieve to their full potential.

The Computing Curriculum focuses on three key concepts; Computer Science, Digital Literacy and Information Technology.

<u>Computer Science</u> introduces children of all ages to understanding how computers and networks work (eg. computer programming and debugging).

Digital Literacy focuses on the safe and responsible use of technology. This also highlights the advantages for collaboration and communication.

Information Technology focuses on the use of computers for functional purposes (eg. collecting and presenting information or using search technology effectively).

Each year group will learn through a variety of units of work throughout the year focusing on one of the three key concepts. Units focus on areas such as online safety, coding, spreadsheets, effective searching, pictograms, animation, databases, game creators and 3D modelling. As children move up through the school, they will use and build upon their existing knowledge and skills demonstrating their progression of skills over time. Additionally, the theme of online safety will be threaded throughout the curriculum and also discussed in detail during Internet Safety Day (February 2025).

Early Years

In the EYFS, opportunities for the use of technology are an integral part of each area of learning and the school ensures that children have access to both continuous and enhanced provision. We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.

• Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

Key Stage 1 Outcomes

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2 Outcomes

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration.

Impact

This scheme of work promotes and builds aspirations for all children to become digitally literate and aware of how Computing is used in a variety of careers and everyday life. Children will become aware of how communication has advanced as a result of technology with a strong focus on how to do this responsibly. Hence, there will be a clear focus on online safety embedded throughout the Computing Curriculum. This will provide children with the skills to manage their mental health and well-being concerning technology alongside the resources available to them if, or when, they require help. We believe this will enable children to become responsible, respectful and competent users of data, information and communication technology.

Inclusion

We aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEND children. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided to ensure all children can reach their full potential, build upon their cultural capital and become inspired by technology. The SENDCo and Computing Subject Leader jointly advise teachers on examples of technology which can be provided to support individual children with particular physical, linguistic and educational needs, including gifted and talented pupils. Where appropriate, an external specialist is used to assess a child's specific needs.

Safeguarding: Online Safety

Online safety is always at the forefront of all uses of technology at Belle Vue Primary School. We understand that technology in schools brings great benefits however, to live learn and work successfully in an increasingly complex society, our children must be able to use technology effectively. We recognise that the use of technology can put young people at risk within and outside of school. Therefore, we will ensure children are aware of how online safety is an integral part of their well-being and support them to be responsible online. We ensure this high level of online safety is maintained and that pupil needs are met by:

- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

Enhancing the Curriculum through Technology

Technology plays an immense role in not only the Computing curriculum, but also the overall day-today life of our school. We believe technology can provide enhanced collaborative learning opportunities, access to rich content and encourage better engagement in all areas of the curriculum. Therefore, by effectively modelling the use of technology, we aim to inspire children to think imaginatively and creatively, as well as having the knowledge and confidence to use technology safely and respectfully both at school and home.

Monitoring

The Computing Subject Leader follows a systematic and regular programme of evaluation and monitoring of the Computing curriculum, across the school. This is so that she can monitor the quality of education being provided to all pupils, including:

- Checking that the school's curriculum 'Implementation' matches its 'Intent'
- Evaluating the success (or otherwise) of curriculum planning and delivery
- Having an awareness of impact and be able to demonstrate progression and attainment
- Having an overview of resource and staff training needs

Monitoring is completed via a variety of methods including:

- Observations
- Work scrutinies
- Pupil interviews / pupils voice
- Staff interviews / feedback

As a result of monitoring, appropriate CPD opportunities are provided for staff on an individual, group and whole school basis in line with the school's wider CPD policy. A record of these opportunities is kept by the Subject Leader, CPD co-ordinator and individual members of staff.

Roles and Responsibilities

The role and impact of technology stretches beyond the National Curriculum for Computing and it is therefore important to acknowledge the roles and responsibilities held by key people across the school.

The following responsibilities are carried out by the head teacher:

- ensuring the consistent implementation of Computing policy
- ensuring continuity between year groups
- overseeing health and safety policy and practice
- resources budget management
- arranging in-service support
- Leading the development and implementation of the school's e-safety policy in line with other Child Protection policies

The following responsibilities are carried out by the Computing Subject Leader:

- presenting exemplary practice in the teaching of Computing
- advising colleagues on planning, delivering and assessing Computing
- Monitoring the effective use of technology and giving advice where appropriate
- ensuring progression in Computing
- suggested purchasing plans for hardware and software
- organising Computing resources
- identifying what support / CPD is needed by individual staff / groups of staff / the whole school
- reviewing and revising the Computing policy and other associated documents
- Co-ordinating and overseeing equipment maintenance

Responsibilities carried out by an ICT Support Technician

All equipment is supported and maintained through a regular visits from a technician from Network IT who works alongside the Computing Subject Leader.