

Boutcher C of E Primary School Subject Stories

Computing



Intent

At Boutcher, we believe in providing pupils with the skills they need to be able to make a positive contribution to society, enjoy and achieve high standards, achieve future economic well-being and to be safe and healthy. We recognise that a focus on communication skills (including ICT) is essential to prepare pupils for a rapidly changing world where in the future they will be using technologies not yet invented. It is estimated that the amount of new technical information is doubling every two years. Therefore, to enable our pupils to be confident, competent and independent users of ICT, we will embrace new and emergent technology and strive to use ICT wherever appropriate to motivate, inspire pupils and raise standards across the curriculum.

Our intent is for pupils to be offered a broad and deep understanding of computing and how it links to their lives. Our aim is to ensure that our children understand the importance of acting in a safe and responsible manner, ensuring that their digital footprint is in keeping with this. Our curriculum offers opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of computer science. Children will develop analytical problem-solving skills and learn to evaluate and apply information technology. This skillset will not be limited to computing; our intention is for our children to apply these skills more widely in their lives.

Implementation

At Boutcher we provide children with a robust and challenging curriculum mostly supported through Code.org. Lessons provide children with concrete, practical experiences as well as plenty of opportunities to use a variety of digital devices to develop their new skills.

Children are often encouraged to work in collaboration with another child when developing their problem-solving and analytical skills.

Computing is an embedded part of the curriculum and children are provided with opportunities to carry out research, create reports and be creative digitally within designated computing lessons and also within other subject areas.

Our curriculum is designed to support and extend children's interests and abilities in computing and we use computing as a vehicle to bring new experiences to our children. Those with a passion for computing are encouraged to develop it and build upon it.

Impact

- Children at Boutcher will be aware of the dangers of the internet and understand the importance of online safety.
- Our children will be excited by computing and inspired to develop their knowledge and skills further, ensuring they are prepared for our rapidly changing world.
- Children will be equipped with the skills to access information and as a result they can become knowledge rich. They will also be to question information online and evaluate digital information.
- Our children will be able to independently select and use software to accomplish goals, including collecting, analysing, evaluating and presenting data and information.

What can I expect to see in a Computing lesson at Boutcher?

- Children discovering and developing their knowledge and skills through interesting and engaging lessons where they learn through a variety of activities.

- Children working collaboratively to analyse and solve problems, engaging in useful discussions whilst developing their reasoning and digital literacy.
- Adults providing initial teaching input, then supporting children's understanding and encouraging them to make links and draw conclusions to difficult problems.
- *Examples of outstanding learning*



Year 5 – A report about faith in the local area carried out in RE



Year 3 – A student chose to code his home learning Stone Age project.

What voice do pupils have?

- Children are encouraged to follow their passions and interests in computing. Many children choose to respond to home learning projects digitally and this is an option available to all children.
- Children evaluate their learning and provide valuable feedback on their experiences of the curriculum. This is used to inform future planning.

Examples of pupil voice

Year 1 – *"I like playing the games with my friends. Sometimes it is hard but my friends help me."*

Year 3 – *"I really enjoy code.org. I enjoy creating algorithms and also trying to solve bugs in the system. Sometimes it is difficult but working with a partner helps as we can share ideas."*

How do children's skills progress?

An example of skills progression from Year 1 – 6

Algorithms					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
To understand what algorithms are.	To understand how algorithms are implemented as programs on digital devices.	To use logical reasoning to explain how simple algorithms work.	To use logical reasoning to explain how simple algorithms work and detect errors.	To use logical reasoning to explain how simple algorithms work, detecting and correcting errors.	To use logical reasoning to explain how simple algorithms work, detecting and correcting errors in algorithms and programs.

What successes were there in the 2020/2021 academic year?

- We responded immediately to school closures, ensuring all of our children were able to access Google Classroom and were taught to navigate the website and upload their work.

- We carried out an audit into the children's access to digital devices at home and ensured that all children had individual access at home and were able to continue their learning.
- Children continued to access the full computing curriculum whilst distance learning and many children developed their skills more widely choosing to present work digitally.
- Children across the school participated in safer Internet Day activities and developed their understanding of this crucial part of the computing syllabus.

What are the priorities in Computing for 2021/2022?

- To ensure that links between computing and other areas of the curriculum are maximised and embedded.
- To develop our assessment processes to ensure individual assessment is informative with children requiring further support identified.
- To ensure that our children's skills acquired during home learning, are maintained and built upon.
- To ensure that our children know how to stay safe online and continue to develop as kind, caring, responsible digital citizens.