Bow Community Primary School

Subject:	**COMPUTING**
INTENT & IMPLEMENTATION	**Through our computing curriculum at Bow we aim to give our pupils the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way in order to flourish. We want our pupils to be able to operate effectively in their future workplace and we want them to know the career opportunities that will be open to them if they study computing. We want children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their activities. We want the use of technology to support learning across the entire curriculum and to ensure that our curriculum is accessible to every child. Not only do we want them to be digitally literate and competent end-users of technology but also through our computer science lessons, we want them to develop creativity, resilience, problem solving and critical thinking skills. We want our pupils to have a breadth of experience to develop their understanding of themselves as individuals within their community but also as members of a wider global community and as responsible digital citizens.** **Implementation:** **At Bow, computing is taught in discreet computing lessons. The computing curriculum is delivered through The National Centre for Computing Education's 'Teach Computing Curriculum'. Having discreet lessons means that the children are able to develop depth in their knowledge and skills over the duration of each of their computing topics and in a progressive manner throughout the year and across the school. Where appropriate, meaningful links will be made between the computing curriculum and the wider curriculum. In computing lessons, the children will use either IPads, Chromebooks to access a range of apps and software alongside the use of some physical devices to support the unit being taught. Five key areas are taught within our computing implementation: computing systems and networks; creating media; programming; data and information; and internet safety. Internet safety is taught in the first week of the Autumn, Spring and Summer term's in order to continue to adapt to and keep a step ahead of current concerns over internet safety. Each year group also receives a unit of work as a part of our RSHE scheme of work that supports them in keeping safe on the internet.** **Children's progress will be assessed and records of the different outcomes will be saved on our staff shared drive.**

Computing progression

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<tr><td>Computing in the Early Years</td><td colspan="6">Although the 2021 Early Years Foundation Stage curriculum has removed ‘Technology’ from ‘Understanding the World’, computing and technology is still vitally important to deliver to Reception children.

Not only will teaching a well-planned Computing curriculum ensure that children enter Year 1 with a strong foundation of knowledge, but Computing lessons in the EYFS also ensure that children develop listening skills, problem-solving abilities and thoughtful questioning — as well as improving subject skills across the seven areas of learning.
We live in a technological world and there is no escape from the reality that technology is integrated into the lives of young children. Just as we ensure the children in our care are ready for the adult world by teaching them maths and literacy, we should also make sure that they are fluent in computer literacy and all-important e-safety.

Computing for the EYFS is centred round play-based, unplugged (no computer) activities that focus on building children’s listening skills, curiosity and creativity and problem solving.
Technology in the Early Years can mean:
• taking a photograph with a camera or tablet
• searching for information on the internet
• playing games on the interactive whiteboard
• exploring an old typewriter or other mechanical toys
• using a Beebot
• watching a video clip
• listening to music
Allowing children the opportunity to explore technology in this carefree and often child-led way, means that not only will they develop a familiarity with equipment and vocabulary but they will have a strong start in Key Stage 1 Computing and all that it demands.

While there is no longer a specific technology strand, the skills learned in computing lessons will ensure progression across all other subjects.</td></tr>
<tr><td></td><td>Year 1</td><td>Year 2</td><td>Year 3</td><td>Year 4</td><td>Year 5</td><td>Year 6</td></tr>
<tr><td>Term 1</td><td>Computing systems and networks – Technology around us</td><td>Computing systems and networks – IT around us</td><td>Computing systems and networks – Connecting computers</td><td>Computing systems and networks – The Internet</td><td>Computing systems and networks – Systems and searching</td><td>Computing systems and networks – Communication and collaboration</td></tr>
<tr><td>Term 2</td><td>Creating Media – Digital painting</td><td>Creating media – Digital photography</td><td>Creating media – Stop-frame animation</td><td>Creating media – Audio production</td><td>Creating media – Video production</td><td>Creating media – Web page creation</td></tr>
<tr><td>Term 3</td><td>Programming A – Moving a robot</td><td>Programming A – Robot algorithms</td><td>Programming A – Sequencing sounds</td><td>Programming A – Repetition in shapes</td><td>Programming A – Selection in physical computing</td><td>Programming A – Variables in games</td></tr>
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Term 4	Data and information – Group data	Data and information – Pictograms	Data and information – Branching databases	Data and information – Data logging	Data and information – Flat-file databases	Data and information – Introduction to Spreadsheets
Term 5	Creating media – Digital writing	Creating media – Digital Music	Creating media – Desktop publishing	Creating media – Photo editing	Creating media – Introduction to vector graphics	Creating media – 3D Modelling
Term 6	Programming B – Programming animations	Programming B – Programming quizzes	Programming B – Events and actions in programs	Programming B – Repetition in games	Programming B – Selection in quizzes	Programming B – Sensing movement

In order to see a greater breakdown of each unit, their learning objectives, success criteria and national curriculum links please refer to the curriculum maps:

KS1 curriculum map

KS2 curriculum map