Broadway Junior School

Subject: Computing | Topic: Animation | Year: 4 | Term: Autumn 2

NC Purpose of Study
A high-quality 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.

Intent	Implementation	Impact
Our vision at Broadway Junior School is that all pupils should enjoy Computing and become confident, passionate and responsible users of technology both inside and outside of school. Through interesting, relevant and inclusive lessons, they will be able to leave Year 6 with a good understanding of how computers and the Internet work, along with being able to complete tasks on them creatively, independently and reflectively for a range of purposes and audiences. The Computing curriculum at Broadway is designed to enable pupils to embrace and utilise new technologies through the application of essential knowledge, principles and concepts. Technology is everywhere and will play a pivotal part in students' lives, therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators, not just consumers of content and our broad curriculum encompassing 'Coding & Computational Thinking', 'Information Technology', 'Computing Systems & Networks' and 'Online Safety' reflects this. We recognise that the best prevention for a lot of issues we currently see with technology and social media is through education.	Computing skills are taught explicitly at Broadway with every pupil receiving dedicated Computing lessons throughout each half-term. Each half-term has a focus on either Information Technology, Coding & Computational Thinking or Computing Systems & Networks with Online Safety lessons also included throughout each half-term. The skills acquired are then embedded throughout the curriculum. Learning is sequenced to build knowledge, skills and vocabulary. Throughout units of work teachers encourage children to make links between past learning and new content. We recognise prior learning and build on it with memorable learning experiences and provide targeted support where necessary. The units address the requirements of the National Curriculum and are broken down to cover all elements of the different strands of Computing. The progression of knowledge and skills statements build year on year to deepen and challenge our learners. We use Purple Mash as the core of our curriculum tied with Teach Computing and activities from Project Evolve to create a comprehensive curriculum providing full curriculum coverage and a variety of skills for our children.	The impact of our Computing curriculum is that we provide pupils with a set of skills to embed a lifelong love of learning and that they build on the knowledge and skills from previous learning. We ensure that every child can become a confident user of technology, while being able to use it to accomplish a wide variety of goals, both at home and in school. Children will have a secure and comprehensive knowledge of how technology works in the world around them and will develop their understanding of how to deal with online situations safely. Children will become confident global citizens. The knowledge organisers outline what we want the children to know within each unit. By nature Computing is going to be practical and hands on. We give the children the opportunity to record individually their responses to key questions. Teachers ensure that children understand and apply the correct vocabulary linked to different elements of the curriculum and this is also recorded within the floor books. Prior and future learning links are also included, so that there is a clear sequence in relation to the progression of skills and activities.

Key Vocabulary
Animation Copy Frame Sharing Controls Sound Effect Stop Motion Animation Software Background Frame Per Second Onion Skinning Storyboard

Knowledge	Skills
• To understand what animation is. • To know what onion skinning is and be able to use this technique for 2D computer animations. • To know how to enhance simple animations using animation software. • To plan an animation. • To create a narrative. • To evaluate animations.	• I can describe what is meant by an animation. • I can describe some common techniques used for creating animations. • I can make a simple animation using a flick book. • I can create a simple animation using animation software. • I can describe what onion skinning is. • I can create a smooth sequence of frames using the onion skinning feature. • I can use the copy frame feature to help with creating a smooth animation. • I can add backgrounds to animations to enhance them. • I can add sound effects to animations to enhance them. • I can create an animated sequence that includes sound effects and backgrounds. • I can identify the features of a successful short animation. • I can explore example animations to gather ideas. • I can use a storyboard to plan a short animation.

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	• I can use a storyboard to create an animation that tells a story or process. • I can use onion skinning, backgrounds and sound to enhance my animation. • I can evaluate an animation based on set criteria. • I can identify successes and areas for development. • I am able to use a display board to share work and view others' work.

	Learning Objectives/End Points				
To understand what animation is. Lesson 1	To understand the term onion skinning and be able to use this technique for 2D computer animations. Lesson 2	To know how to enhance simple animations using animation software. Lesson 3	To plan an animation. Lesson 4	To create a narrative. Lesson 5	To evaluate animations. Lesson 6

Careers

Linking Curriculum Learning to Careers
Discuss how the skills developed in this unit are used in a range of careers, including:

3D Character Animator
Video Game Animator
Concept & Character Designer
Visual Effects (VFX) Artist
Storyboard Artist
Motion Graphics Designer
Character Rigger
Medical & Scientific Visualizer
Architectural 3D Visualizer
Pre-Visualization (Previz) Artist

Transferable skills Creativity: Designing characters, backgrounds and original animated sequences.
Storytelling: Using storyboards to plan a narrative and communicate ideas.
Digital literacy: Using animation software and tools to create digital content.
Planning and organisation: Sequencing frames and developing a clear beginning, middle and end.
Attention to detail: Using onion skinning and copy frames to create smooth movement.
Problem-solving: Improving animation sequences and correcting errors.
Evaluation: Reviewing work against success criteria and identifying improvements.
Communication and collaboration: Sharing animations, responding to feedback and learning from others' work.

Learning from career and labour market information
Introduce careers such as animators, storyboard artists, film editors, sound designers, illustrators and game developers. Explore how these professionals combine creativity and technology to produce digital content.

Addressing the needs of each pupil
Provide inclusive opportunities for pupils to plan and create animations, using storyboards, modelling and step-by-step guidance, with additional challenge to develop more complex sequences and effects.

Linking curriculum learning to careers
Link creating frames, using onion skinning, adding backgrounds and sound effects, planning storyboards and evaluating animations to the work of animators, filmmakers, illustrators and digital media designers.

Encounters with employers and employees
Where possible, invite a parent, school staff member or visitor who works in a creative or digital role to explain how they use animation, visual design, sound or storytelling in their job.

Experiences of workplaces
Explore how animation is produced in animation studios, film and television companies, advertising agencies and game development studios. Use examples of storyboards, animation frames and sound design to show how creative teams develop finished products.

Encounters with further and higher education
Introduce pupils to opportunities to develop creative and digital skills through art and computing activities, animation clubs, college courses, university degrees and technical training in animation, film production and digital media.