Intent, Implementation, and Impact statement for learning in Computing

Intent

At Kettlefields Primary School, our intent for the Computing curriculum is to inspire and empower all pupils to become enthusiastic, confident, and competent learners who are equipped with the knowledge and skills necessary for the future. We aim to provide a comprehensive, engaging, and challenging Computing programme that cultivates creativity, critical thinking, and collaboration. Our curriculum is designed to ensure:

- **Breadth and Depth of Knowledge**: Pupils will develop a deep understanding of three key areas: computer science, information technology, and digital literacy. This includes comprehensive programming concepts from basic block coding to advanced languages, an understanding of algorithms and data structures, and knowledge of data representation and security. We will ensure that learning builds progressively in complexity and depth from Year 1 to Year 6.
- **Real-world Relevance**: We aim to connect Computing with authentic, real-life applications. Projects will be designed around themes relevant to the pupils' lives, thereby preparing them for future careers in an increasingly digital world. We will

invite industry professionals to share insights through workshops, enhancing the relevance of the curriculum.

- **Inclusivity**: Our curriculum is tailored to meet the diverse needs of all learners, ensuring that it is accessible to pupils of varying abilities and backgrounds. We will implement differentiated instruction and provide additional support for pupils with special educational needs, ensuring every pupil has the opportunity to thrive in a digital world.
- **Skill Development for the Future**: We intend to equip our pupils with the essential skills required for their future education and work. These skills include problem-solving abilities, computational thinking, digital communication, and resilience when facing challenges. Our focus is on preparing pupils for jobs that may not yet exist, fostering an adaptable mindset.

Implementation

To implement our Computing curriculum effectively, we employ the following strategies:

- **Curriculum Structure**: Our Computing curriculum is structured into distinct but interrelated areas: Computer Science, Information Technology, and Digital Literacy. Each area is further divided into specific, age-appropriate topics encompassing both theoretical knowledge and practical application, ensuring progression through a coherent curriculum framework that aligns with the National Curriculum requirements.
- **Engaging Pedagogy**: We adopt an approach to learning that fosters curiosity and critical thinking. Teachers will deliver interactive lessons that incorporate hands-on activities, allowing pupils to explore technology through coding challenges, robotics, and game design, engaging them actively in their learning process.
- **Use of Technology**: We ensure that all pupils have access to a wide range of digital tools and resources. This includes coding platforms such as Scratch, online collaboration tools like Google Workspace, and hardware such as robotics kits and programmable devices (e.g., Micro:bit). Our classrooms will be equipped with technology that aligns with the curriculum objectives, fostering an immersive learning environment.
- **Professional Development**: Continuous professional development will be provided for our staff to ensure they remain informed about the latest technological advancements and teaching practices. Training sessions focusing on pedagogical strategies for Computing, updates on new software and hardware, and sharing of best practices will empower teachers to deliver high-quality lessons effectively.
- **Collaborative Projects and Community Involvement**: We will design projects that provide opportunities for pupils to demonstrate their learning to parents and the wider community, fostering a sense of pride and accomplishment.

Impact

The impact of our Computing curriculum can be evaluated through multiple dimensions:

- **Pupil Outcomes**: Our assessments indicate that pupils achieve high standards in Computing, with the vast majority meeting or exceeding age-related expectations. We employ a range of assessments strategies to gauge understanding and inform teaching practices, enabling tailored support for individuals and groups.
- **Engagement and Enthusiasm**: Pupil survey data shows that learners are enthusiastic about Computing. We track engagement through attendance in lessons, participation in extracurricular activities, and involvement in competitions. High levels of interest in projects and positive feedback highlight the effectiveness of our curriculum in fostering a love for technology.
- **Digital Citizenship**: Pupils demonstrate strong knowledge of appropriate and safe online behaviour. They participate in lessons focused on digital citizenship and online safety, evidenced by their ability to articulate the importance of privacy, security, and responsible communication in online environments.
- **Parental and Community Feedback**: Positive feedback from parents and community stakeholders highlights the value placed on the school's Computing curriculum.
- **Continuous Improvement**: We engage in ongoing self-evaluation and reviews of our Computing curriculum, using insights to refine our practices continually. Our commitment to improvement ensures that we remain responsive to emerging technologies and educational trends, further elevating the quality of our programme.

By adhering to these principles of Intent, Implementation, and Impact, Kettlefields Primary School aims to provide an exceptional Computing education that prepares all pupils for the challenges and opportunities of a rapidly evolving digital landscape.