Computing

at Kirkby on Bain CE Primary School

The Kapow Primary Computing scheme of work is meticulously designed to cultivate pupils' curiosity and exploratory thinking, empowering them with a diverse knowledge base about the world. It is imperative that we instil in our pupils not only the technical skills associated with Computing but also an innate drive to understand and engage with the world around them.

Intent:

The overarching aim of the scheme is to build an understanding of how Computing shapes our lives across various scales and over time. Through engaging with this curriculum, we hope to encourage pupils to evolve into resourceful, active citizens equipped with the skills required to contribute positively to their communities and enhance the world they inhabit. Furthermore, our programme is designed to support teachers in enhancing their subject knowledge and pedagogical skills, ensuring they are well-prepared to deliver engaging and information-rich lessons with confidence. In doing so, the curriculum remains both accessible and ambitious, promoting the full participation and potential achievement of all learners.

Implementation:

The implementation of the Kapow Primary Computing curriculum is structured to ensure that it aligns with the National Curriculum's requirements. It is recommended that Computing be taught for one hour per week, facilitating sufficient engagement without overwhelming pupils. Within this framework, the curriculum is divided into unit hubs, each containing essential lesson links, resources, and pertinent information relevant to the unit being taught. These unit hubs correlate with key Computing documents, such as the Progression of Skills and Knowledge and Vocabulary Progression, ensuring a coherent and comprehensive structure.

Moreover, the unit hubs serve as guides to useful resources and suggest potential cross-curricular links, building on pupils' existing knowledge or activating prior learning. A cornerstone of our curriculum design is the spiral curriculum model, which ensures that pupils revisit and further develop their understanding of key themes and concepts throughout their educational journey. By encountering the same ideas multiple times, with each revisit adding complexity, pupils are enabled to make meaningful connections. This approach further reinforces their learning, facilitating mastery over time.

Key aspects of our spiral curriculum include:

- Revisiting Key Concepts: Pupils are introduced to ideas repeatedly during their education, enhancing their understanding with each subsequent encounter.
- Progressive Depth: Concepts are not merely repeated; they are expanded upon, allowing pupils to forge deeper connections.
- Knowledge Retention: Regular exposure to fundamental ideas strengthens memory and mitigates knowledge erosion.
- Skill Development: Pupils refine and apply their skills in varying contexts, sharpening their critical thinking and problem-solving capabilities.

- Adaptive Learning: The curriculum is designed to build on prior knowledge, catering to pupils at their current level. This ensures support for all learners, including those requiring extra reinforcement and those ready for greater challenges.

Impact:

The impact of the Kapow Primary Computing curriculum is assessed through both formative and summative methods. Formative assessment is integrated within lessons via ongoing assessment opportunities, including questioning, retrieval practice, and interactive activities. These measures enable educators to gauge pupils' understanding in real time, allowing them to adapt their teaching methodologies to better meet individual needs.

In addition to formative assessments, each unit provides summative assessment tools, such as an Assessment Quiz and Knowledge Catcher. These instruments allow educators to measure pupils' comprehension at critical junctures, offering insights into knowledge retention and skills acquisition over time.

The Kapow Primary Computing scheme also prioritises teacher confidence, fostering whole-school improvement by supplying high-quality, accessible resources which empower educators to deliver competent and engaging lessons. Support for teacher confidence is structured through clear lesson plans and subject knowledge resources, which include step-by-step guidance to ensure teachers feel adequately prepared, even if they are not subject specialists. Furthermore, Continuous Professional Development (CPD) videos present short, expert-led training sessions, assisting subject leaders in enhancing their expertise and extending support to colleagues.

Whole-school improvement is further supported by consistent high-quality teaching, which derives from a structured curriculum that ensures a coherent approach across various year groups. Assessment tools embedded in the curriculum facilitate the monitoring of progress and the demonstration of impact, aligning with Ofsted expectations. This alignment promotes personal development, broadens pupils' horizons, and guarantees a knowledge-rich curriculum that supports schools in fulfilling inspection criteria.
By alleviating teacher workload, fostering expertise, and maintaining high teaching standards, the Kapow Primary Computing scheme plays a vital role in cultivating a confident teaching staff and delivering a well-structured, effective curriculum. Ultimately, our curriculum is designed not only to develop pupils' Computing skills but also to contribute to a holistic, enriching educational experience that supports the entire school's development.