 ***Banks St. Stephen’s Church of England Primary School***

***“Belonging, Serving, Succeeding”***

Vision for Banks St. Stephen’s Church of England Primary School

“We actively promote a sense of pride in belonging to this community. Leading by example, we seek opportunities to serve God by serving others.  We are ambitious for each individual and determined to enable every member of the school community to flourish and succeed.

**Computing Policy**

**Vision for Computing Policy**

Our Computing Policy aims to provide all students with the skills, knowledge, and confidence to thrive in a digital world. We are committed to creating an inclusive learning environment where technology enhances learning, fosters creativity, and empowers students to be responsible, confident users of technology. Our approach is guided by the principles of **Belonging**, **Serving**, and **Succeeding**, ensuring that every child has access to high-quality computing education.

**Belonging**

We ensure that all students feel included in their learning of computing by providing equal access to technology and digital resources. By promoting a safe and supportive environment, we encourage collaboration, creativity, and respect in the digital space, fostering a sense of belonging for every child in our school community.

**Serving**

We teach children how to use technology to serve others by creating digital content, solving problems, and participating in online communities responsibly. Students learn about digital citizenship, respect for others, and the positive impact that technology can have when used ethically and creatively to support those around them.

**Succeeding**

Our computing curriculum equips students with the technical skills they need to succeed in an increasingly digital world. By providing engaging lessons and opportunities for hands-on learning, we help students develop problem-solving abilities, critical thinking, and a love for technology, enabling them to succeed academically and in future careers.

In summary, our Computing Policy ensures that every student feels they belong, learns to serve others through technology, and is empowered to succeed in the digital age.

**Purpose and Rationale**

Computing is an essential part of our curriculum, providing pupils with the skills to navigate and thrive in a digital world. Using Purple Mash, we offer an engaging platform that supports digital literacy, coding, and computational thinking. Our curriculum promotes creativity, problem-solving, and logical reasoning, preparing pupils for a technology-driven future.

**Subject Importance**

Computing is crucial in modern education and daily life. It empowers pupils to become confident, responsible technology users, focusing on:

* **Digital Literacy**: Safe and effective use of technology, including the internet and digital devices.
* **Computational Thinking**: Problem-solving and logical reasoning through programming and algorithms.
* **Creativity and Innovation**: Encouraging pupils to create digital content, supporting learning across various subjects.
* **E-Safety**: Promoting safe, responsible, and respectful use of technology, with a focus on online security and digital citizenship.

**Links to the National Curriculum**

Our computing curriculum aligns with the National Curriculum for Computing, ensuring pupils:

* Understand core concepts like algorithms, data representation, and logic.
* Solve problems through programming, gaining hands-on experience.
* Apply information technology to solve real-world problems.
* Become responsible, creative, and confident users of technology.

Purple Mash provides structured, age-appropriate resources to meet these objectives, ensuring a balanced and engaging computing education. This curriculum equips pupils with the skills they need for future learning and life in an increasingly digital world.

1. **Aims and Objectives**

**Aims**

* Provide a high-quality computing education, developing skills in programming, digital literacy, and computational concepts.
* Equip pupils with the ability to confidently use information technology to access, create, and share digital content.
* Inspire an understanding of the role of computing in the wider world and encourage exploration of technology-related careers.
* Ensure pupils use technology safely, responsibly, and ethically, focusing on e-safety and digital citizenship.

**Objectives**

* Develop problem-solving and critical thinking through algorithmic and logical reasoning.
* Build proficiency in age-appropriate digital tools and programming languages.
* Foster creativity and collaboration through digital content creation and multimedia projects.
* Promote resilience and adaptability in tackling computational challenges.
* Encourage a positive attitude towards learning and applying technology across subjects.

1. **Curriculum Content**

Our computing curriculum is designed to build progressively across year groups, ensuring continuity and depth in learning. The key topics and themes covered include:

Key Stage 1 (Years 1-2):

* Introduction to basic computing skills and digital literacy.
* Understanding algorithms through simple programming activities.
* Safe and responsible use of technology and online safety.
* Creating and editing digital content, such as images and text.
* Lower Key Stage 2 (Years 3-4):
* Developing programming skills using block-based coding (e.g., Purple Mash tools).
* Exploring computer networks, including the internet.
* Understanding how digital systems work.
* Designing and debugging simple programs.
* Enhancing digital literacy and multimedia content creation.

Upper Key Stage 2 (Years 5-6):

* Advancing coding skills with more complex programming challenges.
* Introduction to text-based programming (e.g., Python basics in Purple Mash).
* Data handling, spreadsheets, and digital research.
* Understanding the impact of technology on society.
* Strengthening online safety awareness and responsible digital citizenship.

Progression

* Our curriculum is structured to ensure that pupils build upon previous knowledge and skills year by year. Key progression aspects include:
* Coding and Programming: Moving from simple block coding in Key Stage 1 to more complex algorithms and debugging in Key Stage 2.
* Digital Literacy: Developing confidence in using different software and tools, progressing to more independent digital content creation.
* Computational Thinking: Enhancing problem-solving abilities by tackling increasingly complex challenges.
* Online Safety: Reinforcing responsible use of technology with age-appropriate discussions on privacy, security, and digital ethics.

By following this structured progression, pupils develop a strong foundation in computing, ensuring they are well-prepared for secondary education and beyond.

1. **Teaching and Learning Approaches**

Pedagogical Strategies

Our teaching methods ensure an engaging and effective learning experience, incorporating:

* Hands-on Learning: Interactive, practical activities that encourage exploration and experimentation.
* Inquiry-Based Learning: Encouraging pupils to ask questions, investigate solutions, and develop problem-solving skills.
* Scaffolded Instruction: Providing guided practice with increasing independence to build confidence and competence.
* Collaborative Learning: Opportunities for teamwork and peer learning through group projects and discussions.
* Use of Purple Mash: Structured lessons and activities tailored to different abilities, promoting skill development in an engaging way.

Differentiation

We ensure computing lessons are accessible to all pupils by:

* Supporting SEND Pupils: Adjustments such as personalized learning plans, additional resources, and assistive technologies.
* EAL Support: Visual aids, simplified instructions, and peer support to aid comprehension.
* Challenging More Able Learners: Opportunities for extended projects, deeper exploration of coding concepts, and leadership roles in group activities.

Cross-Curricular Links

Computing is integrated across subjects to enhance learning experiences:

**Pedagogical Strategies**

* **Hands-on Learning**: Practical activities that encourage exploration and experimentation.
* **Inquiry-Based Learning**: Promoting problem-solving through questioning and investigation.
* **Scaffolded Instruction**: Gradually increasing independence to build confidence and skills.
* **Collaborative Learning**: Encouraging teamwork and peer learning through group projects.
* **Use of Purple Mash**: Engaging, structured lessons tailored to various abilities.

**Differentiation**

* **SEND Support**: Personalized plans, additional resources, and assistive technologies.
* **EAL Support**: Visual aids, simplified instructions, and peer assistance.
* **Challenging More Able Learners**: Extended projects and leadership opportunities.

**Cross-Curricular Links**

Computing is integrated into other subjects to enhance learning:

* **Mathematics**: Coding and algorithms for logical reasoning.
* **English**: Digital storytelling and multimedia presentations.
* **Science**: Data analysis and coding in scientific investigations.
* **Art**: Digital art, animation, and creative media projects.
* **Geography/History**: Research, interactive maps, and data analysis.

These strategies ensure computing is engaging, inclusive, and prepares pupils for a technology-driven future.

1. **Assessment and Monitoring**

Assessment in computing is an essential component of our teaching approach, ensuring that pupils are making progress and achieving their full potential.

Formative Assessment

Ongoing assessments take place during lessons through questioning, observation, and class discussions. Teachers monitor pupil engagement and understanding, providing immediate support and guidance where necessary. Pupils are encouraged to reflect on their learning and discuss their problem-solving approaches, fostering a deeper understanding of computational concepts.

Summative Assessment

At the end of each unit, pupils' complete projects that demonstrate their understanding and application of key computing skills. These assessments include coding projects, digital presentations, and multimedia creations. In addition, pupils engage in activities such as map work and structured presentations to showcase their learning, allowing teachers to assess both technical proficiency and creativity.

Tracking Progress

Pupil progress is recorded using the school using OTrack. This enables teachers to monitor each child’s development and identify any areas where additional support may be needed. Regular assessments help ensure that all pupils are progressing in line with their abilities and receiving the appropriate level of challenge in their computing education.

Feedback

Constructive and timely feedback is provided to pupils to support their learning and improvement. Teachers offer verbal and recorded feedback on projects, highlighting strengths and areas for development. Peer assessment and self-reflection are also encouraged, helping pupils to take ownership of their learning and build confidence in their computing abilities.

1. **Inclusion and Equality**

Accessibility

The computing curriculum is designed to ensure that every child can participate and achieve, regardless of their individual needs. Lessons are adapted to accommodate different learning styles, abilities, and requirements, ensuring an inclusive approach to computing education. Pupils with Special Educational Needs and Disabilities (SEND) are supported through tailored activities, assistive technology, and differentiated instruction to enable them to engage fully in the curriculum.

Cultural Representation

Computing lessons reflect diverse perspectives, highlighting the contributions of different cultures and communities to the development of technology. Pupils learn about key figures in computing history from a range of backgrounds, fostering an appreciation for diversity in the field. Lessons incorporate global digital literacy themes, ensuring that children understand the role of technology in various cultures and societies.

1. **Promoting British Values through Computing**

#### Democracy

Computing lessons encourage children to take part in democratic processes by using Purple Mash's tools to create surveys, vote on class decisions, or design projects that involve collective input, such as creating a class website or app. This promotes the understanding of decision-making processes and the value of everyone's voice being heard. For example, children use Purple Mash to design and distribute surveys to their peers to collect opinions on various topics (e.g., favourite school subjects, ideas for a class project). This allows students to experience how democracy works in action and learn how to analyse results responsibly.

#### Rule of Law:

In computing, children learn about the rules that govern the use of technology, both within the school setting and in the wider world. Teaching about online safety, copyright, and the importance of following ethical guidelines helps instil a sense of responsibility. For example, using Purple Mash's art tools, pupils can design posters that communicate the importance of following online safety rules. This can include advice on appropriate behaviour when using technology and understanding the consequences of breaking the rules.

#### Individual Liberty:

Computing lessons foster individual liberty by encouraging children to explore their creativity and express their opinions through digital platforms. Using tools like Purple Mash, pupils can create their own digital content, such as stories, games, and blogs, that represent their ideas and perspectives. For example, children use Purple Mash's blogging feature to express their thoughts on a topic they care about (e.g., the environment, their favourite hobbies, or their views on a current event). This encourages independent thinking and self-expression in a digital format.

#### Mutual Respect and Tolerance:

Through collaborative computing projects, children learn to work together, appreciating and respecting each other’s ideas and contributions. Exploring how technology can help connect people from diverse cultures and backgrounds can promote tolerance. For example, when undertaking a collaborative coding project, children work together to create a simple digital game or animation using Purple Mash's coding platform. In this project, students must share ideas, delegate tasks, and respect each other’s work, fostering teamwork and an appreciation for each other's contributions.

By using Purple Mash to promote British values in computing, primary school students can engage in meaningful activities that enhance their understanding of democracy, rule of law, individual liberty, and mutual respect. These activities also help develop essential digital skills, preparing pupils for a future in an increasingly interconnected and digital world.

1. **Resources and Materials**

At Banks St Stephen’s, we are committed to providing high-quality, engaging, and accessible computing education that empowers our pupils to develop the skills they need to succeed in the digital world. To support this, we use a range of resources and materials, with a key focus on Purple Mash.

#### Key Resources and Materials for Computing

Purple Mash:

Overview: Purple Mash is our core resource for delivering computing across all year groups. It offers a wide range of interactive tools and activities designed to develop essential digital skills, support creativity, and promote learning in areas such as coding, online safety, digital art, and word processing.

Features: Purple Mash includes a variety of modules that cover:

* Coding and programming (2Code)
* Digital literacy and online safety (2Smart)
* Word processing, presentation, and graphics tools (2Write, 2Paint)
* Collaborative projects and digital storytelling (2Create)
* Data handling and spreadsheets (2Calculate)
* Multimedia projects (2Animate, 2Publish)

Purpose: Purple Mash is used to support the delivery of the National Curriculum for Computing, offering structured learning pathways and resources for all key areas of computing education.

Interactive Whiteboards & Devices

Our classrooms are equipped with interactive whiteboards that allow teachers and students to engage directly with digital content. Pupils use tablets and laptops to access Purple Mash and other online resources, enabling hands-on, practical learning experiences. These devices are used to support interactive lessons, coding challenges, and collaborative projects, enhancing pupil engagement and participation.

Offline Materials:

Printed Resources

In certain lessons, we supplement digital learning with printed materials such as worksheets, workbooks, and coding activity books that reinforce the skills being taught on Purple Mash. These are particularly useful for reinforcing key concepts, such as algorithm design, computational thinking, and basic programming concepts. Offline materials support hands-on activities and provide alternative ways for students to practice and demonstrate their learning.

Teacher Support Materials

Teachers have access to professional development resources and ongoing training opportunities. Purple Mash provides comprehensive support for teachers, including lesson plans, teaching guides, and curriculum maps that align with the National Curriculum for Computing. These materials ensure that staff have the knowledge and confidence to deliver high-quality computing lessons and effectively use the resources available.

### Access to Resources

All students have individual logins to Purple Mash, allowing them to access resources both in the classroom and at home. This ensures continuity in learning and provides opportunities for independent practice and development outside of school hours.

Teachers have full access to Purple Mash’s teacher dashboard, where they can track student progress, assign activities, and review completed work. Additionally, resources such as lesson plans and curriculum maps are accessible to ensure effective teaching and learning.

The resources and materials used in our computing curriculum are carefully selected to provide a rich, engaging, and effective learning experience. With Purple Mash as our primary digital resource, supported by a range of supplementary tools and offline materials, we aim to develop pupils' computing skills while ensuring they are prepared for the digital challenges of the future.

1. **Role of Staff**

At Banks St Stephen’s, the successful delivery of the computing curriculum is a collaborative effort that involves all staff members. Each role plays a crucial part in ensuring pupils develop the necessary skills and knowledge to thrive in a digital world.

#### Teachers

#### Teachers are the frontline educators in the computing curriculum, responsible for planning, delivering, and assessing lessons that engage children and develop their computing skills.

Teachers are responsible for planning lessons that are engaging, interactive, and aligned with the National Curriculum for Computing. This includes the integration of Purple Mash resources to facilitate hands-on learning in coding, digital literacy, online safety, and other key areas. Lessons are differentiated to meet the needs of all pupils, providing opportunities for both independent and collaborative work. Teachers will use the wide variety of Purple Mash tools, such as 2Code for coding and 2Animate for digital storytelling, to encourage creativity and problem-solving. Teachers are expected to make use of both the interactive features of Purple Mash and offline activities to provide a balanced learning experience for all students.

Teachers are responsible for assessing pupils’ progress in computing, using both formative and summative assessments. This includes tracking pupil progress on Purple Mash through the teacher dashboard and providing feedback on activities completed. Teachers should regularly provide constructive feedback to pupils on their work, identifying strengths and areas for improvement, and setting clear learning goals. Where appropriate, teachers may also assess pupils through practical tasks, quizzes, and digital projects, giving students the opportunity to demonstrate their knowledge and skills in a range of contexts.

#### Computing Subject Leader

The Computing Subject Leader oversees the overall implementation of the computing curriculum and ensuring high standards of delivery throughout the school. The role includes the following:

* The Computing Subject Leader ensures the computing curriculum is effectively implemented across all year groups. They ensure that lessons are well-planned, up-to-date, and aligned with the school’s educational goals and the National Curriculum.
* They monitor and evaluate the delivery of computing lessons, observing lessons and reviewing pupil progress to ensure the curriculum is being taught consistently across the school.
* The Subject Leader works closely with teachers to provide guidance on best practices and support for incorporating new technologies and tools, including Purple Mash, into the curriculum.
* The Computing Subject Leader is responsible for ensuring that teachers have access to high-quality resources that enhance teaching and learning. This includes maintaining access to Purple Mash and other online tools, ensuring resources are up-to-date, and providing teachers with the materials they need to teach effectively.
* The Computing Subject Leader plays a key role in staff development by providing training, guidance, and support for teachers to ensure they are confident in delivering the computing curriculum. The Subject Leader ensures that staff have the necessary skills to teach computing confidently and effectively, whether through using online resources, integrating coding into lessons, or promoting digital literacy and online safety.

The role of staff in delivering the computing curriculum is essential to ensuring a high-quality educational experience for all children. Teachers are responsible for planning, delivering, and assessing engaging lessons that foster the development of computing skills. Meanwhile, the Computing Subject Leader oversees the curriculum implementation, ensures resources are available, and supports staff through training and guidance. Together, these roles ensure that the computing curriculum is consistently delivered to the highest standards, equipping students with the skills and knowledge they need for their future digital lives.

At our school, we recognize the crucial role that parents and carers play in supporting their child’s computing education. By working together, we can ensure that children develop the necessary skills, understanding, and attitudes to become confident and responsible digital citizens.

#### **Parental Involvement**

At Bank St Stephen’s, we recognise the crucial role that parents and carers play in supporting their child’s computing education. By working together, we can ensure that children develop the necessary skills, understanding, and attitudes to become confident and responsible digital citizens.

Discussions

Parents are encouraged to engage in regular discussions with their children about what they are learning in computing lessons. This could include asking questions about the different activities students are doing on Purple Mash, such as coding tasks, digital art projects, or their experiences with online safety. We encourage parents to explore topics like the importance of internet safety, the benefits of coding, and how technology is used in everyday life, helping children to understand the real-world applications of what they are learning.

Homework

Many computing-related tasks, projects, and activities are set as homework using Purple Mash. Parents can support their child by ensuring they have access to the platform at home, offering encouragement, and helping their child to complete tasks. Homework might include creating a digital project, solving a coding problem, or writing a short report on an online safety topic. By participating in these activities, parents help reinforce the skills learned in class.

Reports

Children’s progress in computing is shared with parents through regular reports. These reports will outline achievements, areas for improvement, and any specific skills the child has developed on Purple Mash or through other computing activities. This helps parents stay informed about their child’s development and how they are progressing through the curriculum.

Parent-Teacher Meetings

Parents Evening meetings provide an opportunity to discuss the child’s progress in computing in detail. During these meetings, teachers can share how the student is engaging with digital resources like Purple Mash, highlight achievements, and suggest areas where further support might be needed. These meetings also offer parents the chance to ask questions about the computing curriculum, the tools used in class, and ways they can continue to support their child's learning at home.

Regular Communication

In addition to formal reports and parent-teacher meetings, we encourage regular communication between school and home. Following our ‘Open Door’ policy, parents can reach out to the class teacher if they have any concerns or would like additional guidance on how to support their child’s computing education at home.

**11. Evaluation and Review**

This policy will be reviewed every three years or sooner if necessary. Its effectiveness will be evaluated through:

* Pupil progress data.
* Feedback from staff, pupils, and parents.
* Review of teaching practices and resources.

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