# SSMJ POLICY FOR

# Computing

*Following the example of Jesus, together we learn, love and respect one another to be the best we can be.*

Written by: A Currid

Role: Curriculum Lead

Date policy agreed: September 2025

"Following the example of Jesus, together we learn, love and respect one another to be the best we can be,"

# Computing Policy September 2025

**Contents**

## 1. The Purpose of studying Computing:

The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At SSMJ, we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The computing curriculum at SSMJ is carefully planned and structured to ensure that current learning is linked to previous learning and that the school's approaches are informed by current pedagogy. The purpose of this policy is to state how the school intends to make this provision.

## 2. Aims:

The Computing curriculum at SSMJ aims to provide a high-quality education that equips pupils with the foundational knowledge and skills required for an increasingly digital world. Our core objectives are to:

- Develop Computational Thinking: Foster pupils' understanding of how digital systems work, enabling them to apply principles of computer science, including logic, algorithms, and data representation, to solve problems.
- Enhance Digital Literacy: Equip pupils with the ability to use, express themselves, and develop their ideas through information and communication technology safely and responsibly.
- Encourage Creativity and Innovation: Inspire pupils to become active and creative users of technology, enabling them to design and create their own programs, digital content, and systems.
- Promote Online Safety: Instil a comprehensive understanding of online safety practices and digital citizenship, so pupils can navigate the online world with confidence, respect, and resilience.
- Provide a Progressive and Inclusive Curriculum: Ensure that all pupils, regardless of their background or ability, have access to a rich and challenging computing curriculum that builds on prior knowledge and skills from Early Years through to Year 6.

## 3. Intent:

The computing curriculum at SSMJ makes full use of our laptop and Ipad

resources; making links, where possible, with our faith, which is at the heart of our curriculum.

At SSMJ, our intent is to deliver a broad, ambitious, and knowledge-rich Computing curriculum that fully meets the requirements of the National Curriculum. Using the comprehensive Purple Mash scheme of work, we aim to provide a coherent and progressive sequence of lessons that builds foundational knowledge and practical skills from Early Years to Year 6. Our goal is to prepare pupils to be digitally literate and confident in applying computational thinking to solve problems; while also ensuring they are responsible and safe digital citizens in an ever-evolving technological world.

## Implementation:

The implementation of the Computing curriculum at SSMJ is underpinned by the Purple Mash scheme of work. This section outlines the practical strategies and procedures that ensure the effective delivery and monitoring of our computing provision.

### Curriculum Delivery

Scheme of Work: The Purple Mash scheme of work is used as the core framework for teaching computing from Early Years to Year 6. Teachers will follow the units provided, ensuring a systematic and progressive approach to the three pillars of the National Curriculum for Computing: Computer Science, Information Technology, and Digital Literacy.

Adaptation and Differentiation: Teachers are responsible for adapting the Purple Mash units to meet the diverse needs of all learners, including those with Special Educational Needs and Disabilities (SEND), Pupil Premium children, and more able students. This may involve using the built-in differentiation features of Purple Mash, providing additional scaffolding, or offering more challenging extension tasks.

Integration: Computing skills and knowledge will be actively integrated into other curriculum areas wherever possible. This includes using Purple Mash tools for research, presentation, and data handling in subjects like History, Science, and English.

Cross-Curricular Links: The subject leader will provide guidance on meaningful cross-curricular links, highlighting opportunities within the Purple Mash curriculum to enhance learning across the school.

Parents and carers are required to give signed authorisation before their child can use the Internet, either in guided or in independent school work. It is the role of the subject leader to ensure all signed authorisation is in place. Parents and carers are, however, assured that their child's use of the Internet at school is always supervised. A record of those children who do not have permission to use the Internet at school is held by each class teacher and by the school office. This forms part of the home-school agreement and the acceptable use contract.

At SSMJ we also use a variety of tools to develop computing skills through the use of remote learning and children's individual and collective portfolios on Dojo.

**Impact**

After the implementation of this robust computing curriculum, children at SSMJ will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature.

Children will learn key vocabulary and should be to recall this in everyday life. We aim for children to have a knowledge and understanding of computer programmes through writing and debugging code, children will be able to solve problems using technology and computational thinking is encouraged. Children will build resilience through their work and are encouraged to learn from their mistakes. We are actively teaching skills for children to become confident in an ever-growing digital world.

## 4. Teaching and Learning

Hands-On Learning: The teaching approach will be practical and hands-on, encouraging students to actively create, debug, and solve problems using a variety of hardware and software, including the Purple Mash suite of tools like 2Code and 2Animate.

Conceptual Understanding: Teachers will focus on building a strong conceptual understanding of computing principles, rather than simply teaching children how to use specific software.

Assessment for Learning (AfL): AfL strategies will be used throughout lessons to check for understanding and adapt teaching as necessary. Teachers will use the features of Purple Mash, such as the '2Do' and 'Feedback' tools, to monitor progress in real-time.

## 5. Assessment and Progression

Formative Assessment: Formative assessment is an ongoing process. Teachers will use observations, questioning, and the work produced in Purple Mash to assess children's understanding and inform next steps.

Summative Assessment: At the end of each unit, teachers will use the summative assessment tasks provided within the Purple Mash scheme. A summative judgement will be recorded on the school's tracking system.

Progression: The subject leader will monitor the school's progression against the Purple Mash scheme of work. This includes reviewing children's work and ensuring that skills and knowledge are built upon year-on-year, demonstrating clear progression.

## 6. Planning and Resources:

All staff and students have access to Purple Mash accounts, and this platform is the primary resource for delivering the computing curriculum.

Our school a Computing Trolley with 30 laptop computers and 25 IPAD's and Internet access, each classroom also has an IPAD as well as a laptop. There is a timetable for the use of the laptops and i-pads which is updated half termly. At SSMJ we also use online resources.

Members of staff report faults using the online form that is located on the desktop. A technician will set up new equipment, and if needed, install software and peripherals.

In order to keep our school computers virus-free, no software from home will be installed on school computers. Pupils bringing in work on portable storage

disks must first have it scanned. Where teachers are transferring files between their home and school, they must have up-to-date virus protection software on their home computers; they are encouraged to use Cloud storage linked to their email address as well as encrypted pen drives to ensure GDPR legal requirements are met. Teachers have laptops for personal use, which have the same virus protection as the school computers.

## 7. EYFS:

It is important in EYFS to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world, such as role play. Children gain confidence, control and language skills through opportunities to explore using non-computer-based resources which may include items such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language. The children have the opportunity to use the computers/laptops, a digital camera, IPAD's and floor robots (bee-bots). Then, during the year, they gain confidence and start using the computers to find out information and to communicate in a variety of ways.

## 8. KS1:

By the end of key stage 1 pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

**KS2:**

By the end of key stage 2 pupils should be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

## 9. Safety:

Internet access is monitored daily and a report is sent nightly to the Headteacher which alerts to any unauthorised access or word searched that anyone using the schools internet tries to access.

## 10. Equal Opportunities:

At SSMJ, we are committed to providing a teaching environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teachers use a range of strategies to ensure inclusion and also to maintain a positive ethos where children demonstrate affirming attitudes towards others. Support for specific individuals is well considered and planned for, with consideration given to how deeper learning and further challenge can be provided for and demonstrated by children who require further challenge.

Computing provides the ideal opportunity to extend/ enhance and support children' learning alongside other curriculum subjects.

## 11. Inclusion:

At SSMJ, we are committed to providing an inclusive computing curriculum that caters to the needs of all pupils, regardless of their background, ability, or starting point. The Purple Mash scheme of work provides a flexible framework that supports this commitment through the following strategies:

- Special Educational Needs and Disabilities (SEND): Teachers will use the built-in accessibility features of Purple Mash to support pupils with SEND. This includes using simplified interfaces, voiceovers, and differentiated activities. The subject leader will work with the SENCO to ensure that targeted support, such as small group interventions or adapted tasks, is provided to help pupils with SEND access the curriculum and make progress.
- Pupil Premium: We ensure that all pupils have equal access to computing resources, including laptops, tablets, and a home-learning login for Purple Mash. The subject leader will monitor the engagement of Pupil Premium children to ensure they are participating fully and making at least expected progress. Targeted support may be provided to address any identified gaps in knowledge or skills.
- More Able Pupils: The Purple Mash scheme of work includes more challenging, open-ended tasks that allow pupils to extend their learning and develop their computational thinking skills to a greater depth. Teachers will identify more able pupils and provide opportunities for them to work on advanced projects, act as peer mentors, and engage in problem-solving activities that go beyond the basic curriculum requirements.

## 12. The Role of the Subject Leader:

The computing subject leader will provide ongoing support and training to staff, including demonstrations of new Purple Mash features and guidance on best practices for teaching computing.

The subject leader will conduct regular work reviews, including looking at work saved in Purple Mash, to monitor the quality of teaching and learning across the school.

Pupil interviews will be conducted to gather feedback on their experiences in computing and to evaluate the effectiveness of the curriculum.

The subject leader may conduct informal lesson drop-ins to observe teaching and provide feedback.

This policy and its implementation will be reviewed periodically to ensure it remains relevant and effective.

## 13. Parents (Including Homework):

We, at SSMJ, actively encourage the involvement of families and the wider community to help support the teaching of computing. The annual internet safety day involves the whole school; it has helped to establish greater involvement with parents and the wider community to share their knowledge and expertise. Parents and carers are involved with supporting their children with topic- based homework.

Parents are encouraged to support the implementation of computing where possible by encouraging use of computing skills at home during home-learning tasks and through the school website. They will be made aware of online safety and encouraged to promote this at home. A SSMJ we also offer online safety guidance via the school website as well as inviting parents and families in for online safety information sessions.

At SSMJ we actively encourage the involvement of families and the wider community to help support the teaching of computing.

Parents and carers are involved with supporting their children with topic-based homework. Computing homework tasks are well communicated and have a clear purpose, often providing children with the means to research and explore a topic to support their classroom work.