



Subject Story: Computing



Intent - What are we trying to achieve?

Our Computing curriculum aims to help support our children for a rapidly changing world through the use of technology. We help our pupils to develop their computational thinking skills and creativity, applying the fundamental principles of computer science to a variety of problems. They will understand that computing can have a positive impact on the world and know how to stay safe online.

At the core of our computing curriculum is computer science, in which pupils are taught the key principles of information and computation, how digital systems work, and how to use this knowledge through programming. Building on this knowledge and understanding, we intend for our children to use information technology to create programs, systems and a range of content. We aim to ensure 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.

Implementation – How is the curriculum being delivered?

We have analysed the national curriculum programme of study for Computing and broken down the content into the following stands: computers, using computers, coding, networks, net-searches and E-safety. The curriculum content is broken into specific objectives for each year group and mapped to show progression through the year groups.

Computing is taught both discretely and cross-curricular, support other areas of learning across the school. This begins in Early Years; children in Reception learn about the technologically diverse world through the 'Understanding the World' area of learning. The children's learning of key computing knowledge and skills is taught through a balance of direct teaching and opportunities in the children's continuous provision.

In Key Stage 1 and 2, our curriculum is delivered through our exceptional scheme of learning designed by our specialised computing teacher. It is comprised of three aspects: Digital Literacy & Online Safety, Computational Thinking and Information Technology. Every child in KS2 receives one lesson of skill-specific Computing provision a week, but our learning doesn't stop there. We utilise our laptops the curriculum to enhance our children's learning experiences.

A Curriculum Map is shared on the school's website so that parents can support their child's learning at home. Knowledge Organisers are also available on the school's website, in the classroom and on display in the lab to support the children's learning and for them to reference.

Pupils will be given verbal feedback each piece of work so that they can make rapid and sustained progress over their school life.

Impact - What difference is the curriculum making?

Computing



- I stay safe online
- I am digitally literate
- I know how to make a positive contribution to a digital world



Saint Michael Catholic Primary School & Nursery

Excellence • Enrichment • Enjoyment

Our Computing curriculum teaches essential life skills for modern children. It will help them to become active participants in their digital world and prepare them for navigating it independently and responsibly as they mature. Computing will promote the pupil's spiritual, moral, social and cultural development by ensuring they understand that their moral code applies to their digital presence. They will see that computing can be a force for positive world change. Computing will promote British Values by ensuring children understand right and wrong, understand consequences and know that mutual respect is important.

Computing will help pupils develop a Growth Mindset by demonstrating that most problems are fixable by unpicking them logically.

If you visited a Computing lesson at St Michael's you would see:

- Enthusiasm and passion as they engage with their lessons.
- Proficient users of technology who can work independently and collaboratively.
- Clear progression in technical skills.
- Confident and supportive Digital Leaders who are able to assist children and staff in delivering high quality Computing sessions.
- Children using devices and the internet safely

Pupil Voice

Year 1: *I like computing because we learn how to code and we learn how to use a laptop.*

Year 3: *I really enjoy computing and think it is important for us to understand how computer work because it will help us when we are older and have a job.*

Year 5: *We can learn how to keep ourselves safe online, how to make our own games using coding.*

An example of progression in our curriculum

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Using Computers	Birth to 5 Matters Develops digital literacy skills by being able to access, understand and interact with a range of technologies.	use technology purposefully to create digital content	use technology purposefully to create, organise, store, manipulate and retrieve digital content.	With support, I can select and use a variety of software to accomplish goals	With support, I can select, use and combine a variety of software on a range of digital devices to accomplish given goals	independently select, use and combine a variety of software to design and create content for a given audience	independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information

Our Diverse Curriculum

As a school, we are passionate that our children receive a broad, balanced, inclusive and diverse curriculum. Within this subject, we will ensure:

- Where appropriate, computing lessons will focus on a diverse range of genders, ethnicities, social classes, religions and localities, in order to gain an insight into the world we live in.

Our Ambitious Curriculum

Our curriculum is designed to give all our children the knowledge and cultural capital they need to succeed in life.

Pupils with Special Needs: For our children with SEN and/or disabilities we are always thinking about their needs. We provide specialist software or equipment to allow them to access the same software and communicate through signs, symbols or verbal instructions to best support the child. Other strategies to support pupils access the curriculum include:

- Key vocabulary on Knowledge Organisers which are provided to parents and available within the lessons.
- Teacher modelling.
- Step-by-step guides.
- Revisions on key knowledge and skills within Quizzy Thursday to help consolidate understanding.
- Pair discussion to support and consolidate understanding.
- Teacher focus group.
- Specialised equipment, e.g. mouse, headphones



- Additional teacher support provided in the lessons.
- Task boards which show step by step instructions.

Disadvantaged Pupils: Our computing curriculum allows our disadvantaged pupils to have an opportunity to use technology that they may not be able to access outside of school. We want to ensure that all of our pupils are given the best start to their computing education and can achieve this by using a range of different software. We fund places for our PPG children to attend our twice weekly Tech Club after school.

More Able Pupils: We identify pupils that show exceptional attributes in our curriculum. We aim to challenge our more able pupils in computing through the use of questions, encouraging them to decide what software would best work for a given programme, model and explain their steps to others.

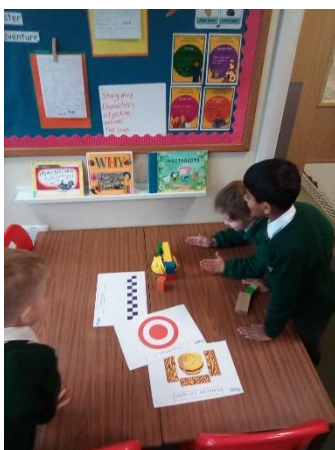
Outstanding Examples of Learning



Year 6 building a 3D house, using formula to calculate volume and pitch their property to a client.



Year 2 using Scratch Jr for coding. They had a go at 'tinkering' and exploring the software.



Creating algorithms on beebots to navigate them through an arch way



Nursery enjoying phonics learning in the imaginarium to find the letter 's'.