

Subject Computing

Computing Rationale

At St Michael and All Angels we want our children to strive to be digital leaders. We want them to have no limits to what their ambitions are and grow up wanting to be web developers, IT consultants, software engineers or even computing teachers! We want them to embody our core values. Our children will always strive to be "Ready, Willing and Able" to learn and develop. We have digital leaders who work with the Subject Leader and their peers to develop their digital capital. All classes have pledged their allegiance to the Google Internet Legends Code and do this on an annual basis. We share this information with parents and carers. We want our children to remember their computing lessons in our school, and to cherish their learning opportunities.

Bringing computing alive in a modern and challenging and rapidly changing society is important at SMAAA!

Intent

The Computing curriculum at SMAAA promotes curiosity and a love and thirst for learning. We want to equip all children with the skills that will prepare them for opportunities, responsibilities and experiences in later life.

It is ambitious and empowers our children to become:-

S-Sensitive M-Motivated A-Articulate A-Adventurous A- Adaptable.

We want to equip them with not only the minimum statutory Computing National Curriculum but to prepare them for the opportunities, responsibilities and experiences in later life.

For example, some of our Year 6 pupils were engaged in computing work with the Knowsley City Learning Centre. We want our children to use the vibrancy of our great town and city to learn from other cultures, respect diversity, co-operate with one another and appreciate what they have. We promote SMSC and Fundamental British Values and our core values placed at the heart of everything that we do. This often feeds into computing. For example, during Safer Internet Day 2019- Consent the whole school enjoyed a deep-dive drop-down day. To reinforce the importance of Safer Internet Day the digital leaders worked with the Subject Leader to create a whole school display. We love celebrating Safer Internet Day at SMAAA.

We enrich the pupils' time in our school with memorable, unforgettable experiences and provide opportunities which are normally out of reach- this triggers their interests and passions. For example, on multiple occasions the children receive specialist code teaching from Knowsley

City Learning Centre staff. This development of skills is also extended to staff during Master Classes. We firmly believe that it is not just what happens in the classroom, it is about the added value we offer to really inspire our children. For example, recently all year groups took part in online safety learning with key coding staff from Sony. This is an experience that we will be repeating in the future. We want to enrich the lives of our children by giving them learning experiences, which they will cherish. The curriculum, is designed to drive forward the intention of school to support pupils to leave our school as caring, confident and ambitious learners ready to develop as young people who contribute to the community.

Implementation

The Computing curriculum has been carefully built and the learning opportunities and assessment milestones for each year group crafted to ensure progression and repetition in terms of embedding key learning, knowledge and skills. We focus our teaching on four main themes of computing: code, connect communicate and collect. These are revisited year on year so that pupils progressively build their skills and knowledge. In addition to this, we provide specialist teaching of computing to pupils across school and frequently revisit Online Safety through specific modules and themed days like Safer Internet Day. Computing subject specific characteristics which we expect the children to demonstrate, have been developed and shared with all in school. These characteristics underpin all work in computing and form a focal point for display areas and provide a common subject specific vocabulary for all staff and pupils. Each discipline is taught and revisited in each phase, at a progressively deeper level.

Staff also receive regular CPD from the school Subject Leader and external agencies. Staff use their Professional Diary to log their own development with computing skills and any progress towards improvement that they make.

The characteristics of computing are:

- Competence in coding for a variety of practical and inventive purposes, including an application of ideas in other subjects.
- The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity. Also, have an understanding of the connected nature of devices.
- The ability to communicate ideas well by using applications and devices throughout the curriculum.
- The ability to collect, organise and manipulate data effectively.

Staff are encouraged to teach the Computing curriculum in a block of lessons within 1 week, half termly, as this ensures sufficient time is allocated to Computing.

Impact

We use formative assessment in all Computing lessons. We use summative assessment each half term to cover the milestones. The assessment milestones for each area have been carefully mapped out and broken down for each year group. This means that the skills in Computing are progressive and are built on each year.

Staff use assessment grids to systematically assess and track the attainment of the children, and to inform future planning. Assessment information is collected each term and analysed as part of the monitoring cycle. This process provides an accurate and comprehensive understanding of the quality of education in Computing. Monitoring of Computing includes work sampling, learning walks and pupil, parent and staff voice.

All information is gathered to inform further developments, CPD and so provision is adapted accordingly.

The next computing monitoring will take place Spring 2020.

At SMAAA our children are digital leaders!

Ready
Willing
Able

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M-Motivated
A-Articulate
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A-Adaptable.

