St Martin's
Multi Academy Trust

Curriculum policy: Computing

Computing:

Responsible, competent, confident, creative users of Information and communication technologies (ICT)

Curriculum Intent

Through computing we want our children to use digital technology safely and responsibly to help them solve real life problems. We want our children to become competent, confident, and creative participants of an increasingly digital world.

Curriculum Aims

We want children to be able to:

- Ask questions, discuss, communicate understanding, and revise their ideas
- Use specialist vocabulary
- Understand and clarify what computing is and the importance and value of studying the subject
- Develop age-appropriate knowledge, understanding and skills in terms of computer science, information technology and digital literacy
- Evaluate online content and their own and others' work
- Use technology responsibly and safely
- Create their own online portfolio

Lesson structure

We want computing to be an enjoyable experience. We believe that children learn best when there is a clear structure and purpose for the learning.

Computing is taught using an enquiry approach. Each unit begins with an overarching question to hook and engage the children. There is also a clear unit outcome, providing a clear purpose for the learning.

Computing is a creative subject and children will be involved in making digital artefacts, ranging from programs and presentations to virtual models and movies.

Each lesson begins with a clear learning objective. Success criteria are expressed as 'I can' statements which the children can self-assess as the lesson and unit progresses.

Children will develop their skills and understanding of:

Computer Science

Where they will learn to:

- Program, first through physical manipulation, to a pictorial representation of code, to a virtual on-screen manipulative

Information technology:

Where children will acquire:

- Skills in using core 'office' applications to work with text, multimedia presentations and data analysis, as well as digital media from photography and audio to video, animation, and virtual reality

Digital literacy:

Where children will develop an understanding of:

- How the internet, the World Wide Web and search engines work
- How to use these and other technologies safely and responsibly

Planning and Resources

Each unit employs the same structure. Teachers begin by looking at the unit overview. This provides an at-a-glance overview of what will happen in the half termly unit. It offers practical advice regarding resourcing and teaching of the unit of work. It starts with the unit title and key enquiry question.

Most units end with children producing a digital artefact which they can upload to their online portfolio.

It is essential that teachers read, digest, and fully understand how each lesson builds towards producing the finished digital artefact.

Throughout the lessons teachers will make constant reference to the importance of using technology safely and respectfully, keeping personal information private; identifying where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Curriculum Implementation

We teach computing as an explicit subject from Years 1 to 6 using the Rising Stars scheme which covers all strands of the National Curriculum.

We teach computing for an hour each week and through incidental usage in other curriculum areas.

All children work on the same core tasks. Those that grasp content and concepts quickly can go to work on the 'stretch and challenge' extensions within the task.

In Early years we will ensure that our children receive a broad and balanced, play-based experience of computing through the use if technologies and investigate tools.

Assessment

Formative assessment opportunities are integrated throughout the units. Some are informal and depend on the use of talk, eavesdropping on children's discussions or through direct conversation with children to check their understanding and correct use of vocabulary.

Each unit is clearly evidenced with a title page which breaks down the 'I can' statements for each lesson. The 'I can' statements should be constantly referred to throughout the lesson.

By looking at which 'I can' statements the children have achieved, the children, teacher and subject leader can quickly determine who is working at age expectations and the knowledge, skills and concepts that require further attention.

Inclusion

We teach computing to all children, whatever their ability. Computing lessons are planned to meet the expectations of each year group, and the individual needs of the children. Those working towards expectations will work on tasks that are adapted to suit their needs. Questions posed within the sessions provide opportunities for all children to be able to contribute.

Role of Subject Leader

- Ensure that the statutory requirements of the national curriculum for computing are met
- Ensure appropriate professional development opportunities are provided for all staff
- Monitor their subject to ensure consistency of approach
- Ensure regular and appropriate assessment of computing takes place and have a clear overview of who is achieving age related expectations
- Ensure that children who are not making enough progress to achieve age related expectations have been identified, and appropriate interventions put in place to ensure they catch up
- Ensure appropriate resources are available
- Engage with outside agencies and online communities to keep up to date and become the expert in their chosen subject in the school

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