Curriculum Overview St Andrew's Church of England Junior School

Curriculum Area: Computing

Subject Lead: Imogen Davies

Our curriculum approach to geography reflects our ethos statement:
'Shining a light of a world of Possibilities'.
In particular, we are keen for pupils to discover their own passion for computing learning.

Intent

Our intention for the St Andrew's computing curriculum is that computing encourages confident and independent learners who can embrace and utilise new technology in a socially responsible and safe way. Linked to our Curriculum drivers - Curiosity, enquiry and creativity, community and possibilities and ensuring pupils acquire the range of skills needed to be, we want all children to:

- Be masters of technology, using technology positively, responsibly and safely
- Understand that there is a choice with using technology and as a school we utilise technology to model positive use
- Demonstrate their learning through creative use of technology
- Have access to the many opportunities technology can provide for them
- Become skilful computer scientists
- Be fluent with a range of tools to best express their understanding
- Have the independence and confidence by Upper Key Stage 2 to choose the best tool to fulfil the task and challenge set by teachers.

We recognise that online safety education is a whole school matter and goes well beyond the computing curriculum alone; therefore, our teaching of framework objectives will come in many forms, for example, through discrete online safety, PSHE or RSE lessons, as well as other curriculum areas, pastoral interactions, home learning, assemblies and special events. With this approach, it is our intention that pupils will build resilience and develop safe and appropriate behaviours online, which in turn will lead to positive online experiences.

Implementation

Our curriculum is designed to allow children to build on their computing knowledge and skills as they progress through the school. To ensure this happens:

- Computing will be taught every week following a unit of lessons
- Units of lessons have been chosen for each year group by the Computing Coordinator using lesson plans provided by eLims which have been developed with primary schools
- Each teacher is responsible for delivering Computing lessons as an individual subject and where appropriate, lessons can be cross-curricular.
- All children have access to the technology across the school and technology to support their learning
- Teachers use the Key vocabulary set out in the vocabulary progression document- vocabulary will be built on year upon year.
- The key skills progression grid is used to ensure coverage and progression.

Impact

Our teachers rely on a range of tools to assess the knowledge and skills pupils have; their progress and development points. By the end of a unit we expect that:

- Children are enjoying and experiencing technology that they may not have access to in other areas of their lives
- Children are able to use and apply technology to develop skills across programming, multimedia and online safety
- Children are gaining confidence in using a range of technologies and sharing their knowledge and understanding with parents and the wider community
- Children have the opportunity to provide a student voice through creating policies and decision-making with our school's computer captains

Planning

We take our objectives from INSIGHT and subscribe to eLim for access to training hub sessions, as well as planning documents for each year group. This helps us to plan and to ensure the lessons are increasing the depth of understanding and range of knowledge throughout their time at St Andrew's. Therefore, skills will be built upon consistently throughout the key stage. These lessons will cover all the objectives that will need to be met for that year group. Greater depth opportunities will be planned and will fit into the schemes of work. Teacher may then adapt these lessons, if they need to, to suit their class. Teacher will be expected to adapt the planning to suit their SEN children. The school website has links to planning. This has been separated into year groups: Year 3, Year 4, Year 5, Year 6. Each term, year groups will have different units to focus out of; programming, technology in our lives, handling data, online safety and multimedia.

Knowledge and skills progression through the school

Using the key units, programming, technology in our lives, handling data, online safety and multimedia, KS2 knowledge and skills will be developed to involve:

Programming:

- Design, write and debug programs that accomplish specific goals
- Controlling or simulating physical systems.
- Solve problems by decomposing them into smaller parts.
- Use sequence, selection and repetition in programs; work with variables.
- Work with various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work.
- Use logical reasoning to detect and correct errors in algorithms and programs.

Technology in our lives:

- Understand computer networks including the internet.
- Understand how networks can provide multiple services, such as the World Wide Web.
- Use search technologies effectively
- Appreciate how search results are selected and ranked.

Handling data:

- Collecting, analysing, evaluating and presenting data and information.

Multimedia

- Select, use and combine a variety of software (including internet services) on a range of digital devices. Design and create a range of programs, systems and content that accomplish given goals.

Online Safety

- Use technology safely, respectfully and responsibly.
- Recognise acceptable/unacceptable behaviour.
- Know a range of ways to report concerns and inappropriate behaviour. Be discerning in evaluating digital content.
- Understand the opportunities networks offer for communication and collaboration

Recording

Lessons will rarely require written notes. Work will be documented online (google classroom and purple mash) pictures and self-assessments. Ongoing teacher assessment will take place using INSIGHT (our whole school assessment system). Alongside this, teachers will be assessing understanding of Online Safety by using the ActiveBYTES 'I can…' statements to help inform their assessment on INSIGHT.

Reporting

On our annual reports, which are given to parents at the end of the year, a judgement will be made regarding their child's attainment in Computing relating to the national curriculum for their year group. For example, HNM (Has Not Met), ARE (Age Related Expectations), GD (Greater Depth).

Monitoring

Curriculum leader will collate evidence including analysing how planning matches the evidence in books, learning walks, speaking to pupils about their learning and discussing with colleagues what has gone well as well as any lessons learnt. The Curriculum Leader will produce a yearly report submitted to SLT. Where relevant, implementation of school polices (such as marking) will be reviewed in light of the well-being school's agenda to ensure the workload for computing is both manageable and is making an impact on the children's learning.

Review

Spring 2023