St Buryan Academy Primary School
Believe, Achieve, Aspire

Computing One Page Overview

Proud member of the Leading Edge Academies Partnership

Intent:

Believe
Children will have the knowledge and understanding to go into their next stage of life appreciating the important role of computing both in our leisure and our working lives.

Achieve
Children will develop a love and passion for computing that will last a lifetime.

Aspire
Children will ask questions to understand the importance of computing; seek to use computing in their leisure time; and find ways to use computing in their everyday lives.

Due to computing being an essential part of most jobs, including those not yet invented, St Buryan Academy have tailored an information technology curriculum that offers high quality computing teaching plus opportunities to use a range of hardware and software in all curriculum areas in order to prepare our children for the future.

- All children will have access to at least one hour of computing per week.
- Opportunities are provided for children to use a range of software and hardware in other curriculum areas.
- All children are encouraged to use desktop computers and iPads to research information in other subjects
- All children are encouraged to use computing in their homework, they will also have access to Purple Mash resources at home.
- The curriculum overview is progressive and varied.
- Staff will be supported to develop their pedagogy and feel confident in lesson delivery.

As a school, we have chosen the NCCE Computing Scheme of Work from Year 1 to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It is a very robust scheme that covers all of the national curriculum requirements with fantastic progression throughout the ages. Furthermore, it gives excellent supporting material for less confident teachers.

Implement:

Coverage through Computing:

- Class teachers delivers an hour computing lesson at least once a fortnight.
- All year groups to have access to computer room and set of i-pads each week.
- Year 1 to Year 6 will all teach online safety and coding units.
- Minimum of 3 units to be taught (1 per term) from Rec to year 6.
- Curriculum overview carefully constructed to include different areas: being a safe computer user, algorithms and programming, digital literacy and information technology.
- Computer lead teacher is available for advice when necessary
- Curriculum planning has teaching tutorials to support class teachers
- Knowledge organisers to be made available for teachers and pupils before and during unit to enhance vocabulary understanding.

Early Years

- We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:
- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.

Key Stage 1 outcomes

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.

Key Stage 2 outcomes

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- 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.
- 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.

Assessment:

- Ongoing assessment within lessons
- Opportunity to assess pupil progress based on Purple Mash activities.
- Develop 2Simple Computing Assessment tool

Monitoring:

- Staff questionnaire used to establish levels of confidence
- Learning walk/drop-ins scheduled
- Pupil Voice
- Work scrutiny

Impact:

Data?

- Children are aware of the benefits and dangers of the internet
- Children know how to use the internet safely
- Children are confident in using the internet for research
- Children are confident in producing music, films, podcasts and games
- Children understand algorithms and programming
- Children are aware of future jobs in the computing industry and that they have the skills to work in jobs that are not yet invented

Teacher CPD/monitoring:

- Subject leader to provide CPD to increase staff confidence in delivering computing lessons.

Community/families:

- Work created by the children can be shared on the school website and Facebook account.
- E-safety tips to be shared on school newsletter and at parental meetings.
- Involve parents in Safer Internet Day.

Current priorities/Next steps

- Liaise with IT Services to audit range of devices within school.
- Develop ongoing relationships with Secondary Schools and identify exceptional learning opportunities for our pupils.
- Subject leader to raise profile of computing throughout the school.