



St Stephen Churchtown Academy
Teaching and Learning Principles
Subject: Computing



Every child matters; every moment counts!

School Vision:

Our school will be an exciting place to learn!

We will:

- nurture individuality
- develop independence
- support children to reach their full potential
- encourage learners to be resilient

School Mission Statement:

To work in close partnership with the children, their families and the wider community to develop;

- Curiosity
- Courage
- Creativity

Subject Intent:

We define curriculum as the totality of a child's experience at St Stephen Churchtown Academy. This includes not only what activities and learning they are immersed in but also the processes involved in how the child learns.

Curriculum Intent:

To ensure curriculum quality we have addressed the following:

- Developing sequential learning where pupils know more and can do more
- Local context and filling the gaps from pupils' backgrounds
- Considering depth and breadth and curriculum content
- Ensuring exposure and immersion in high quality texts linked to topics
- Having clear and focused opportunities for assessment
- A mastery approach
- Listening to the pupil voice
- Reviewing and evaluating curriculum design
- Clear curriculum leadership and ownership

Subject Implementation:

- Every class will study 6 topics each year, which are focused on the three areas of Computing, ICT and Digital literacy (E-Safety)
- Links will be made between prior learning and future learning
- New topics will begin with a recap of prior knowledge gained/taught
- Computing terminology and vocabulary will be reinforced and demonstrated within the class
- Children will use a range of resources; from computer (programming) themed story books in EYFS, chrome books, iPads (with Aspire resourced apps), practical resources - Lets go Code, programmable resources – BeeBots, BBC MicroBits.

Subject Impact:

We aim for every child to be able to:

- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- be responsible, competent, confident and creative users of information and communication technology.

Skills Progression:

At Step 1, we use the objectives from the National Curriculum to ensure good coverage and challenge for all. We carefully track the objectives to ensure that new learning builds on prior knowledge and consolidates understanding showing sound progression across the depth and breadth of the subject.

Within lessons and topics, we ensure sufficient time is given to recall prior learning so that children are able to see and develop links within their learning.

For further information, please see the subject overview grid and the skills progression document.

Contextual example:

In KS1 the children will discover and understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions, progressing into KS2 where they will use and apply this knowledge, alongside logical reasoning to explain how a given algorithm works and be able to detect and correct errors in algorithms and programs.

Teaching and Learning Expectations:

- Lessons will promote a love of learning
- Activities/questions will promote curiosity
- A minimum of 1 hour per week of discrete computing teaching with addition time within other subjects – e.g. internet research, presentation of work, online completions
- Links within English and Maths
- Regular opportunities for AfL through a range of activities
- Recall of prior learning - quizzes, coding – building on knowledge, verbal discussion

Working Walls/Displays:

- Computing work in curriculum books (topic word links)
- Class display of printed work with key vocabulary
- Examples of work on the school website / social media

Monitoring/Assessment:

- Exit Points (eg: quizzes, coding games)
- Summative Assessment - EYFS, end of KS1 and the end of KS2 – Aspire Assessment against LO
- Pupil Conferencing
- Learning Walk/Lesson Observations
- Work Scrutinise