

# Wallsend Jubilee Primary School Computing Curriculum Statement

At Wallsend Jubilee Primary School, we want every child to be happy and enthusiastic learners of Computing, and to be eager to achieve their absolute best in order to fulfil their individual talents. We passionately believe that the recipe for success is high quality first teaching in Computing, which is central to the life of our happy, caring school. We want all children to 'Be the best they can be.'

At Wallsend Jubilee, we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Knowledge and understanding of ICT is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross curricular learning to engage children and enrich their experiences in school.

## Intent – what we are trying to achieve

- Our principal aim is that children leave Wallsend Jubilee Primary School with a wide range of happy and rich memories in computing formed through interesting and exciting experiences.
- Our high-quality computing education will engage and inspire pupils to develop a love of computing whilst increasing their self-confidence, creativity, and sense of achievement.
- Children will meet the National Curriculum expectations in computing, which will be taught by highly qualified staff who will support children to develop their computing skills.
- All children will study computing every afternoon over the course of one week per half term. This will allow children to spend more time deeply embedding their knowledge and skills.
- Children will develop self-confidence and teamwork skills through collaborative learning and demonstration of their skills.
- We aim for our children to be able to use technology to research, collate, analyse, evaluate, share, and exchange information effectively.
- Children will understand how digital systems work and use this to design, write and debug their own programs.
- Children will use technology to solve problems and to present content in a variety of ways. We
  want them to create, organize, store, manipulate and retrieve digital content independently and
  confidently.
- Children will be digitally literate. We want them to recognise common uses of information technology that is used in industries across the world and how these technologies are evolving.
- It is our intention that our children are responsible users of technology and can use the internet respectfully and safely.
- Children will have the opportunity to learn to use a variety of technological devices such as iPads, Robots, microscopes etc.
- Children will understand how British Values relate to computing. We promote tolerance through different people's ideas that may be built on cultural diversity which promotes mutual respect.
- Children will have the opportunity to work independently and as a team to build resilience and self-esteem through a range of activities.
- Opportunities will exist for children of all ages to experience learning beyond the classroom through local authority events and school-based wider opportunities.

## **Characteristics of a Computational Thinker**

- Algorithms The ability to create step by step instructions or rules to solve a problem.
- Abstraction Able to identify important information and remove unnecessary detail.
- Logic Able to analyse and make predictions.
- Decomposition Able to break a problem down into smaller manageable parts.
- Pattern Recognition Able to observe patterns, trends and spot similarities.
- Evaluation Able to assess the solution and make judgements.

# Implementation – how do we translate our vision into practice?

- The curriculum hours in computing are non-negotiable and will be followed by all staff in the school. Fixed timetables will be set before the academic year and monitored by the Senior Leadership Team and the computing coordinators.
- Where necessary, staff will receive training and CPD in computing.
- Carefully designed schemes of learning, which meet National Curriculum objectives, ensure consistency and progress of all learners.
- Enrichment opportunities may include: local authority events, visitors to school, wider opportunity computing education and workshop seminars.
- Learning objectives in every computing lesson are set in order to guide children to achieve their potential. This ensures work is demanding and matches the aims of the curriculum.
- High quality input from experts and educational resources complement the delivery of specialist learning admirably.
- Actively promoting aspirations for the future. Children develop an understanding of how subjects and specific skills are linked to future jobs.

Here are some of the jobs you could aspire to do in the future as a Computer Technician.

- App developer
- Business Analyst
- Computer games developer
- Cyber intelligence officer
- Data entry clerk
- Digital Marketer
- Forensic computer analyst
- Robotics Engineer
- YouTube star!!!

### **Cultural Capital**

- Children consider the consequences, advantages and disadvantages of things such as hacking, cyber bullying, privacy, ethical decisions relating to how ICT is used and abused as well as computer science related crime.
- Opportunities to discuss view points are encouraged whilst ensuring children are respectful to others.
- At all times within the subject, children are encouraged to recognise an individual's strength and support their development. Students are encouraged to embrace diversity and treat all others with respect both in and out of the classroom.

- An underpinning drive to develop children who are resilient, respectful, determined, and respectful in Computing creates a positive set of values to apply to all areas of life. This is consistent across all subjects.
- Children are taught about...
  - how to use the internet positively including social media,
  - how to leave a positive digital footprint and the impact this has on their lives including in the years to come.
  - the history of computing and the influence of key historical figures in the development of modern day technology
  - The dangers of the internet are highlighted to children and they are taught about what to do if they are uncomfortable with any online behaviour or material they see.

### Impact – What is the impact of our curriculum on the students?

- Children are happy learners within computing and they experience a wide-ranging number of learning challenges.
- Through computing children deepen their appreciation for the 6 Rs for learning.
- Children of all abilities and backgrounds achieve well in computing. This is reflected in good progress that reveals a clear learning journey. Children talk enthusiastically about their learning in computing and are eager to further their development.
- Clear outcomes focus and guide all computing development plans and drive improvement.
- Fundamental British Values are evident in computing and children understand how we can celebrate difference.
- Children will gain an appreciation and understanding of the background and historical context of computing.

We aim for our fun, engaging and challenging Computer lessons taught by confident, knowledge rich staff to equip our children to be proficient users of technology both now and throughout their lives. We want our children to be:

- Confident and competent users of technology
- Critical thinkers that can solve problems
- Responsible, respectful, and safe users of data, information, and communication technology
- Creative and imaginative using technology to present, record and share their work to a wider audience
- Aware of technological uses and developments in the wider world.

Through this exposure, children will produce work and 'Be the best they can be.