TWEEDDALE PRIMARY SCHOOL

POLICY FOR

COMPUTING AND ICT

Review of the Policy

This policy provides guidance on teaching and learning at Tweeddale Primary School. It reflects the views of teaching staff and was agreed by the Local Governing Body on **10/03/21** .

The policy will be reviewed by the Head Teacher annually and by the governing body in **March 2024** or earlier if required. The implementation of the policy is the responsibility of the staff and will be monitored by the Head Teacher, Senior Management and individual curriculum coordinators.

Signed……. Date……
Headteacher

Signed…….. Date……
Chair of Governors

Computing and ICT Policy

At Tweeddale Primary School we believe that Computing and the use of ICT is an integral part of children's education. We will give each child the opportunity to apply and develop their technological understanding and skills across a wide range of situations and tasks. Children will be enabled to develop a confident and safe approach to Computing and the use of ICT, with an understanding of the capabilities and flexibility of their resources.

Broadly, Computing refers to activities such as coding and using digital video editing and ICT refers to the use of programmes such as MS Word and equipment such as cameras.

We believe that Computing and ICT will continue to be a major part in the children's life at home, in further education and in places of work. As part of equipping our children with effective and transferable life skills we will ensure that they are highly competent and confident in Computing and the use of ICT.

Objectives

The National Curriculum 2014 states that a high quality computing curriculum equips children to use computational thinking and creativity to understand and change the world. The core of computing is computer science and at Tweeddale Primary School children will be taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Children will be equipped to use ICT to create programmes, systems and a range of content. Computing at Tweeddale, ensures that children become digitally literate, able to use and express themselves and develop their ideas through ICT, at a level suitable for their academic stage, that will develop them for the future workplace and as active participants in a digital world.

Aims

At Tweeddale Primary School we aim to develop children's knowledge, understanding and skills so they can:

- Understand and apply the fundamental principles and concepts of computer science.
- Analyse problems in computational terms and have repeated practical experience of writing computer programmes in order to solve such problems.
- Evaluate and apply IT, including new or unfamiliar technologies, analytically to solve problems.
- Be responsible, competent, confident and creative users of ICT.
- Use ICT safely.
- Work collaboratively through the use of GSuite for Education.

The Curriculum

At Tweeddale Primary School, knowledge, understanding and skills in computing and ICT are built upon and developed in each year group, from Reception to Year 6.

The Foundation Stage

In the Foundation Stage, children will:

- Know how to operate simple equipment, e.g. turn on a CD player and use a remote control.
- Show an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones.
- Show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.
- Know that information can be retrieved from computers.
- Complete a simple programme on a computer.
- Use ICT hardware to interact with age-appropriate computer software.
- Recognise that a range of technology is used in places such as homes and schools.
- Select and use technology for particular purposes.

Key Stage 1

Throughout years 1 and 2, children will:

- Understand what algorithms are, how they are implemented as programmes on digital devices and that programmes execute by following precise and unambiguous instructions.
- Create and debug simple programmes.
- Use logical reasoning to predict the behaviour of simple programmes.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of ICT beyond school.
- Use technology safely and respectfully, keeping personal information private, identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2

Throughout years 3, 4, 5 and 6, children will:

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

- Understand computer networks including the internet, how they can provide multiple services, such as the worldwide web and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programmes, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly, recognise acceptable / unacceptable behaviour, identify a range of ways to report concerns about content and contact.

Planning

Early Years Foundation Stage

Teaching plans are drawn up by the class teacher in accordance with the Early Years Foundation stage Curriculum – Understanding the World - Technology. EYFS Medium Term Planning Sheets are used by the class teacher to identify the objectives for each half term. The short term planning outlines each week's activities, identifying the knowledge, concepts, skills, attitudes and values that will be developed, and details differentiation, deployment of staff/volunteer support and resources. The class teacher keeps these individual plans, and the subject leader monitors and reviews them regularly.

Key Stages 1 & 2

Computing is planned by each class teacher in accordance with the National Curriculum and based on the 'Switched On Computing' scheme of work. Medium term plans, based on the scheme, are drawn up by class teachers at the beginning of each half term. They will ensure an appropriate balance and distribution of work across each half term with opportunities to revisit and extend children's learning. During each half term, specific learning objectives, tasks and activities are recorded on short term weekly planning sheets. Sheets for weekly planning specify organisational details, including teaching modes, differentiation, deployment of staff/volunteer support and resources. Class teachers keep these individual plans and the subject leader will monitor and review them regularly.

Progression and Continuity

At Tweeddale Primary School we plan activities in Computing which build on the children's prior learning. We plan progression through the scheme of work to give an increasing challenge for children as they move through school. We will give children of all abilities the opportunity to develop their skills, knowledge and understanding to enable individual learners to make the best possible progress appropriate to their ability and stage of development.

Curriculum Links

(Please see other subject policies)

Effective teaching of Computing and ICT will make connections across other curriculum areas and through continuous provision in the EYFS and Key Stage 1.

Computing is strongly linked to mathematics, science and design technology and provides insights into both natural and artificial systems and online-safety is an important part of our school's PSHE curriculum. In all subjects, children at Tweeddale Primary School will have opportunities to gain skills, knowledge and understanding in the following areas:

- Finding things out, gathering information from a variety of sources, entering, storing, and retrieving information.
- Developing ideas and making things happen through text, tables, images and sound.
- Selecting and adding to information by planning and giving instructions to make things happen.
- Exchanging and sharing information, sharing ideas and presenting information in different forms, to best effect.
- Reviewing, modifying and evaluating work.

Equal Opportunities

(See also Equal Opportunities Policy)

Ensuring equality of opportunity does not mean that all learners are treated the same. At Tweeddale Primary School, children are considered as individuals with particular needs and potentialities. Each child is given encouragement and the opportunity to develop their full potential in Computing and ICT, with appropriate support provided as necessary, whatever their gender, race, religious belief, cultural background or disability.

Special Educational Needs

(See also Policy for Special Educational Needs)

Children at our school will work at an appropriate level of difficulty and challenge across the curriculum. Class teachers will monitor and assess the ability and level of understanding of individual children in Computing and ICT and will teach accordingly. Advice and support can be sought from the Computing Curriculum Leader, SLT members or Headteacher.

Conversely, learners of gifted ability in Computing and ICT will be appropriately challenged in order to extend their knowledge and understanding and to maintain motivation. Differentiated work and enrichment opportunities will be planned for those children by the class teacher.

Resources

At Tweeddale Primary School, children and staff have access to a range of ICT equipment, including desktop computers and Chromebooks. The computers are linked to the school network and the Internet and to the resources of the London Grid for Learning. The school network has wired and wireless connections through the building.

Each classroom has a computer linked to an interactive whiteboard and some classrooms have an additional computer. Our school has an IT Suite, with 30 computers for children and a teacher's computer linked to a projector.

We also have two sets of 32 Chromebooks, one for the ground floor classes and one for those on the first floor. We have a further 60 chromebooks which have been given to the school by the DfE to be loaned to vulnerable children durin

There are desktop or laptop computers in other locations through the school.

Other ICT equipment, including CD players, DVD players, video cameras, scanners, Digital cameras are used as part of the curriculum.

A range of other electronic devices, including video projectors, music systems, and photocopiers are located within the school. These, and devices in the home, such as automatic washing machines, tumble driers and radio alarm clocks, are identified, discussed and, where possible operated, as part of the 'control technology' aspect of the curriculum.

Through the use, experience and discussion of a varied range of equipment, children will gain knowledge about the use of ICT and its implications for their lives.

Recognising Children's Achievements

Children's achievements in Computing and ICT are recognised and celebrated through:

- Display of learners' work in classrooms and public areas.
- Showing work to the class, other classes, and to the whole school in assemblies and to the Head Teacher.
- Head Teacher Awards and Star of The Week certificates.

Assessment, Recording and Reporting

Learners are assessed in Computing and ICT by teachers in the course of their teaching, through observation, questioning and analysis of work. Teachers will identify each child's progress, determining what each child has learned and to plan for next steps.

Feedback to children

Feedback to children is through discussion about their work and the marking of work. Children will be involved in the assessment of their own work so as to help them to understand their own strengths, needs and future targets for development. We encourage children to make judgements about how they can improve their and their peers work.

Home School Links

Children and parents have access to the resources of the LGfL through their Unified Sign-On accounts. They also have access to Gsuite for Education and its related apps through their school Gsuite accounts.

Parents are invited to Safer Internet Day and other on-line safeguarding information events. They are also kept informed of online safety updates through the newsletter and the school Twitter account.

Access to On-Line Resources

All disadvantaged children and their parents will have access to on-line resources. Parents who may not otherwise have access to the internet may use the school resources if they wish, through appointment with the school.
Children who may not otherwise have access to the internet have access during breakfast club, after-school club and at other times.

Computing Subject Leader

The Computing Subject Leader is responsible for:

- Co-ordinating all aspects of Computing and ICT provision for learners throughout the school.
- Developing the Computing Policy, in consultation with teachers, the Head teacher and the Governing Body.
- Modelling good practice in the teaching of Computing and the use of ICT.
- Advising and supporting teachers and support staff in relation to Computing and ICT, including contributing to in-service training.
- Monitoring Computing, in conjunction with the Head teacher, through discussion with staff, by checking the Medium Term Planning of individual teachers to ensure coverage and progression, and through analysis of learners' work.
- Recommending purchases of Computing and ICT resources and for the organisation of those resources.
- Keeping up-to-date with developments in Computing teaching and learning, and disseminating information to colleagues as appropriate.
- Completing an annual review of Computing for the School Development Plan.
- Maintaining an organised Computing Curriculum Leader file.

Conclusion

At Tweeddale Primary School we believe in the importance of equipping our children for life. We will ensure that our children have the skills and knowledge to use computers, the internet and all aspects of IT effectively, confidently and safely.