



Computing Policy

Tibshelf Infant & Nursery School
[Version 1.0]

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Reviewed By (Name)	FGB
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Tibshelf Infant and Nursery School

Computing Policy

Tibshelf Infant & Nursery School is committed to all aspects of safeguarding and promoting the welfare of children and young people, and expects all staff and volunteers to share this commitment.

Rationale

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

'Building on this knowledge and understanding; pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.' National Curriculum 2014

At Tibshelf Infant and Nursery School we believe that computing is a fundamental aspect of the modern world. Computers, tablets, programmable toys, video cameras are a few of the tools that can be used to acquire, organize, store, manipulate, interpret, communicate and present information. As such, we aim to equip children with the skills and abilities necessary to thrive outside of school and throughout life. The purpose of this policy is to state how our school intends to make this provision.

We believe that computing should:

- Motivate and enthuse pupils
- Encourage the development of problem solving skills
- Provide opportunities to encourage computational thinking
- Allow children to become creators of digital content rather than consumers of it
- Have the flexibility to meet the individual needs and abilities of each pupil
- Provide the essential life skills necessary to fully participate in a modern digital world
- Communicates and presents information in new ways, which helps pupils understand, access and use it more readily

Aims

- Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- Meet the requirements of the National Curriculum programs of study for Computing.
- Use computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use computing skills and various devices throughout their later life.
- To enhance learning in other areas of the curriculum using computing.

- To develop the understanding of how to use computing safely and responsibly.

The National Curriculum for Computing aims to ensure that all pupils:

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

Objectives

Early Years

- It is important in the foundation stage to give children a broad, play-based experience of computing in a range of contexts, including outdoor play; it is not just about computers. Early years learning environments should feature computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on a device or program a toy. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

Key Stage 1

By the end of key stage 1 pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs are executed by following a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict and compute the behaviours of simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private,
- Recognise common uses of information technology beyond school.
- Be safe online, including mental health/well-being and online safety (this incorporates healthy online/offline relationships, sexting/'youth produced sexual imagery' and terrorist/extremist material).

Planning

We use the National Curriculum to ensure that we are teaching the three strands of computing: computer science, digital literacy and information technology. Underpinning all computing learning will be e-safety. Teaching and learning of computing will be through:

- individual work
- paired work
- small group work
- class/large group work

The curriculum plans are designed to enable pupils to achieve stated objectives allowing for a clear progression of skills as they move through school.

Inclusive Teaching

Teachers should ensure equal access to all pupils when using ICT equipment. Teachers should familiarise themselves with material to ensure the quality of provision within their own teaching situation. IT can be used to support SEND children on a one-one basis where pupils receive additional support. Members of staff use Proloquo2go, a communication and language tool, to build a pupil's language skills to ensure the needs of individual children are met.

Cross Curricular links

As a staff we are all aware that IT and computing skills should be developed through core and foundation subjects. IT and computing should be incorporated into the curriculum plan of work for all subjects. IT should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding. Our school provides pupils with opportunities to enrich and deepen learning using cross-curricular approaches to enhance children's experience and confidence.

Assessment and Recording

Key objectives to be assessed are taken from the National Curriculum. Assessment for Learning is an informal part of every lesson to check pupils' understanding and give information; teachers make informal judgements, through observations, discussions with pupils and looking at completed work. These informal notes are recorded on the weekly/daily planning sheets to inform future planning and teaching. Key Stage 1 children are assessed every second term on the expected standard of attainment for their year group, pupils working towards or at greater depth are highlighted. As assessment is part of the learning process it is essential that pupils are closely involved.

Monitoring and Review

The Head teacher and computing coordinator will:

- Coordinate to make a bi-annual summary report which evaluates the strengths and weaknesses and indicates areas for further development.
- Monitor the standard of the children's work and quality of the teaching through lesson observation, pupil discussion and children's work.
- Review hardware and software needs in light of planning.

Resources and Access

Devices: All classrooms have an interactive whiteboard, lap top and an iPad, with four / five computers in each classroom, with FS1 having two IWB's and two iPads. Within school there are 10 mini iPads for the children to use and two SEND iPads. There are also electronic toys such as recording devices, beebots and remote control toys to support learning in Foundation Stage and Key Stage 1. ICT and computing resources are located in a central store.

Software: We encourage staff and children to confidently use a range of software on the iPads and laptops, as well as accessing programs through the internet.

Security

Mobile devices are stored in the ICT secure cupboard area with pull down shutters. The use of computing equipment is in line with the school's Acceptable Use Policy. The E-Safety policy is followed in order to keep children and adults safe online. The data protection policy is followed. For further information please refer to the relevant policies on the school website.

Maintenance

Equipment should be handled with care, faults or problems should be reported to Chris –the Office Manager. All equipment must be returned after use and appropriately stored.

Staff Development

Regular CPD will be undertaken in order to ensure that computing is being taught effectively to support learning.

Governors

All governors are interested in the development of computing to promote high quality teaching and learning in the school. Dave Fox-Johnson is our nominated governor responsible for the monitoring and evaluation of Safeguarding within the school.

Parental Involvement

Parents are encouraged to support the implementation of IT and computing at home to develop computing skills for pleasure and through home learning tasks. Parents are made aware of issues surrounding online safety, through Safer Internet days, training, emails and the school website, and they are encouraged to promote this at home.

Written: May 2021

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