

Waterthorpe Nursery Infant school



Computing Policy

February 2024

Approved by: Curriculum Committee

Date: February 2024

Next Review Date: Spring 2026

Introduction

Computing is regarded as being the collecting, handling and processing of information using electronic devices. At Waterthorpe Nursery Infant School, we view the importance of Computing in preparing children for the rapidly evolving technology centred world; in which, developments in computers and technology demands progressing skills and knowledge from users. Pupils at Waterthorpe are provided with the opportunity to develop their skills, knowledge and understanding of Computing set out in the National Curriculum as part of our own broad and balanced teaching approach.

Intent

Our Computing policy is designed to promote children's computational thinking. We understand the importance of the role the digital world plays in everyday life, therefore we teach with the aim to give children opportunities to put knowledge to use, and ensure that pupils become confident, digitally literate learners. We give children access to a variation of high-quality hardware and software that they will need to be successful learners. We embed the importance of having an overall understanding of internet safety.

For children in the Early Years Foundation Stage, Computing is an aspect which is embedded throughout the EYFS curriculum. Children are given access to high-quality age-appropriate hardware and software that promotes the foundations of Computing skills and understanding needed for progression throughout school. Staff are aware of the importance that Computing and technology plays in the every-day lives of learners.

In Key Stage One Computing, children are given opportunities to apply computing skills in their study of National Curriculum subjects at their appropriate level to help give a broad and balanced curriculum. We aim to deliver fun and engaging lessons which help raise standards and allow all pupils to achieve to their full potential. We set high expectations of children in all lessons, adapting activities in order for all children to access the Computing curriculum to their full potential. At Waterthorpe, we understand the value technology plays not only in supporting the Computing and whole school curriculum, but overall day-to-day life of the school.

Our curriculum is planned and sequenced using the Teach Computing Curriculum. The knowledge and skills intended for children to embed from our planning works towards intended end points from the National Curriculum.

We intend for progression to be logical to the pupils as each lesson connects to the last and the small steps allow children to clearly see how they are steadily building on their Computing knowledge and skills, working towards something that they now know or can do that they previously didn't.

Through high quality teaching, we intend to provide a broad, balanced and enjoyable curriculum. We aim to develop the following essential characteristics of confident users of technology:

- Develop confidence in Computing
- Develop skills across the whole range of Computing as a tool for learning and investigation
- Develop competence in Computing, which will extend across the curriculum and into the child's present and future lives
- Encourage problem-solving skills

- Develop collaborative skills and improve communication skills
- Develop an awareness of the uses (and limitations) of technology and appropriate applications
- Develop the ability to make informal choices
- Develop an awareness of how to stay safe when using the Internet (through access to the Online Safety policy)

Implementation

TEACHING METHODS AND ORGANISATION

In the Early Years Foundation Stage, we teach Computing as an integral part of the topic work covered during the year. Opportunities for learning take place throughout provision, and staff work with children to facilitate any 'in the moment' learning, to promote pupils' computational thinking. Children are provided with a variety of technology within provision and are taught to use these to appropriately.

In Key Stage One, computing has been mapped out on to a curriculum ladder. Our long and short term planning is based on the Teach Computing planning overviews. Both Year 1 and Year 2 follow their tailored plans throughout the year. Curriculum ladders and plans are designed to show a progression of knowledge and skills throughout a child's time at Waterthorpe. Computing is mostly taught as a stand-alone lesson. However, wherever possible each opportunity is used to teach cross curricular. Across school, we plan a three-year cycle of topics so we can build up schemes of work including incremental small steps building towards an end point. This means that in KS1, each lesson relates to the next so that pupils can clearly see their sequence of learning and how what they learnt yesterday has helped them today. Within the schemes of work, opportunities for the revision of facts and the introduction to key vocabulary are also built in.

Year 1	Computing skills and networks – Technology around us	Creating media – digital painting	Programming A – Moving a robot	Creating Media - Digital Writing	Programming B – Programming animations
Year 2	Computing systems and networks – IT around us	Creating media – Digital photography	Programming A – Robot algorithms	Data and information - Pictograms	Programming B – Programming quizzes

Throughout the programmes of study, children will experience a variety of teaching strategies, which will enable them to acquire and develop the key knowledge and skills that have been clearly identified within each unit of work. Pupils are taught to apply their knowledge and understanding when using new and various types of technology.

Through Computing, children will acquire a broad range of subject knowledge, and where possible, will have the opportunity to draw on key skills from other subject areas. For example, incorporating Science for researching facts. In lessons, children are given the opportunity to both

work on their own, and to collaborate with others, listening to other children's knowledge enabling them to develop a deeper understanding.

Support staff regularly work with children and teachers in the computer suite. Children with physical disabilities will have access to specialist equipment, if required, which enables them to access the Computing curriculum and use Computing in other areas.

TEACHING FACILITIES AND RESOURCES

We have a range of resources available which successfully supports delivering the Computing curriculum.

We have a computer suite which is connected to the Internet through broadband. There is a firewall in place to minimise the possibility of children accessing undesirable materials. All other PCs are also connected to the Internet. All five classrooms and the nursery have at least one multi-media PC. These are linked to the colour printer in the staff workroom. Sets of programmable 'toys' and IPADs are available for use in Foundation Stage and KS1.

The school has electronic whiteboards/touchscreen technology within each KS1 and Foundation Stage 2 classroom as well as in the school nursery.

We have a class set of 25 IPADs in school which are kept in a lockable charging trolley. IPADs are available for each teacher to use to support lessons at their convenience. Staff members make others aware when they are using the IPADs and how many will be used.

The school has a web site, which can be accessed at www.waterthorpeinfantschool.co.uk

The Local Authority 'google-mail' emailing system is used for emailing and all staff have an email address. All staff have access to Local Authority emails and information through a Microsoft Share Point 365 log in; this is used to access Sheffield School Point.

DIFFERENTIATION

Differentiation will be by task, support and outcome. Care in the planning of the lesson content for the support of pupils with Special Educational Needs or Disabilities (SEND), including the very able, will ensure that they are provided with tasks suitably matched to their ability. Differentiation may be achieved by modifying the task, questioning, language used, stimulus, or by providing extension activities and individual support.

INCLUSION AND EQUAL OPPORTUNITIES

All pupils will have an equality of access to a broad and balanced curriculum irrespective of gender, ethnicity, class, culture, ability or any other potentially discriminating factor. Additional support is given as appropriate and following our SEND Policy. This is reflected fundamentally in all teachers' planning. Our Equal Opportunities policy is adhered to across the Computing curriculum and with extra-curricular activities.

Activities will be created within topics, which will encourage children to reflect on their own attitudes and values in relation to a wider world, e.g. tolerance and understanding. Statements have been created and shared on the school website to outline how our Computing curriculum promotes British values.

LINKING POLICIES

E-Safety
Special Needs
Equal Opportunities
Child Protection
Health and Safety

THE ROLE OF THE SUBJECT LEADER

Computing within the school is monitored by the subject leader. They will keep staff up to date with new developments. The subject leader has responsibility for leading developments within their area and for monitoring planning, teaching and learning.

There is a long-term planning day per year in order to plan for next year's curriculum. Subject leaders are responsible for writing the medium and long-term plan, which carefully plans for progression and depth suited to the age/year group. As part of this planning process, subject leaders also need to consider trips and visiting experts who will enhance the learning experience.

PROFESSIONAL DEVELOPMENT

The school is committed to the continuing professional development of staff and training will take place to meet the whole school priorities and individual needs. In-service training may take place by attendance on courses, both within and outside the Local Authority (LA), or by whole school on-site training either during staff meetings, twilight sessions or on an In-service training day. A budget allocation is given for course fees and supply costs.

SCHOOL IMPROVEMENT PLANNING

Our school Improvement Plan/Single Integrated Development Plan identifies development needs, planned activities, costing and success criteria for Computing. This is monitored termly and included in the Headteacher's report to governors. The plan has a full review each year in the Summer term when work is evaluated and new priorities are identified.

THE ROLE OF PARENTS

Parents/carers/volunteers are encouraged to participate in the Computing curriculum through invitations to support family workshops, to join us for special events and to accompany us on

visits. Teachers may also design appropriate curriculum themed home learning tasks in Y2, which children complete with adults at home.

IMPACT:

We will know if the curriculum has been successfully implemented if all pupils demonstrate a progression in skills and knowledge. Our quality teaching and learning will be seen across the school with an increase in the profile of Computing. We measure the impact of our curriculum through a range of methods.

ASSESSMENT, RECORDING AND REPORTING

We measure the impact of the curriculum with assessments. Formative assessments are used within each lesson with key questions built into lesson plans. This assessment for learning allows teachers to be flexible with adapting the sequence of learning to ensure that children are knowing more and remembering more.

In KS1, summative assessments are collected from teachers once every half term, where attainment is judged alongside the key learning objectives/end points using a traffic light system. In the Foundation Stage, children are assessed against the relevant statements in Development Matters, and when appropriate, the Early Learning Goals (ELGs). Children in F2 are assessed every half term, with the children in F1 being assessed every term.

These judgments are used to inform the subject leader and the class teacher which children are performing below, in-line and above expectations. The assessments give teachers and subject leaders confidence in the progression of skills and knowledge as they can be used to compare throughout the year to see if intended outcomes have been met. Assessments help us to target next steps in learning.

PUPIL VOICE AND MODERATION MEETINGS

We measure the impact of the curriculum by talking to the pupils and talking to the teachers. Pupil voice questionnaires are carried out throughout the year and moderation meetings between staff are used to look at learning from all year groups. Moderation meetings take place on a rota for all subjects to allow teachers to come together to compare work from a particular subject to ensure their judgements are fair.

Evidence of Computing work can be found in children's topic books, FS journals and photographic evidence on Tapestry. All children will use Computing vocabulary accurately and will begin to make relevant links between different curriculum subjects when looking through their work. All children will also be able to speak confidently about their learning, skills and knowledge in Computing.

HEALTH AND SAFETY GUIDANCE

The school is aware of the health and safety issues involved in children's use of computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT technician, Health and Safety Leader or Headteacher who will arrange for repair or disposal.

- children should not put plugs into sockets or switch the sockets on
- trailing leads should be made safe behind the equipment
- liquids must not be taken near the computers
- safety guidelines in relation to IWBs will be displayed in the classrooms
- Online safety guidelines will be set out in the Online Safety Policy

MONITORING AND REVIEW

This policy will be monitored by the Computing subject leader. A monitoring programme will be followed each year and will include monitoring reports, by the Computing leader on the effectiveness of the policy.

Policy Review: This document will be reviewed in Spring 2027

Equality Impact Assessment Template

Name of policy or project being assessed?	Date
Computing	04/02/2024

Priority Level	
High	
Medium	
Low	X

Lead Officer: Shelly Appleby
Members of the assessment team: Shelly Appleby & Suzanne Marriott
Others involved in the assessment (peer review/external challenge): Curriculum Committee members
<u>What are the aims of the policy or project?</u> To: • Develop confidence in Computing • Develop skills across the whole range of Computing as a tool for learning and investigation • Develop competence in Computing, which will extend across the curriculum and into the child's present and future lives • Encourage problem-solving skills • Develop collaborative skills and improve communication skills • Develop an awareness of the uses (and limitations) of technology and appropriate applications • Develop the ability to make informal choices • Develop an awareness of how to stay safe when using the Internet (through access to the E-Safety policy)
Who is the intended customer/service user of this project or policy? Staff and Pupils
<u>What are the desired outcomes from this project or policy?</u> To provide a clear approach to the learning of Computing
List any other key policies, procedures, projects or strategies that this policy/project has implications on: Curriculum, Equal opportunities, E-Safety, Safeguarding

What are the racial, disability and gender equality implications of the policy or project? To ensure that all groups are given equal opportunities to access this area of the curriculum	
Does the policy or project have any significant positive impact for: ▪ Different racial groups ▪ Disabled persons ▪ Men and women ▪ Boys and girls	Yes
Does the policy or project have any significant adverse impact for: ▪ Different racial groups ▪ Disabled persons ▪ Men and women ▪ Boys and girls	No
Do you have any evidence?	The policy ensures access to all groups. Disabled children have special priority in accessing technology to support their learning.
Is there any way that you could reduce or eliminate the adverse impact or increase positive impact?	
Action to take	
If you have indicated there is a negative impact, can it be justified?	N/A
If you have indicated there is a negative impact and it cannot be justified, is it discrimination?	N/A
If you have answered YES, please list all the changes that you have made to eliminate this discrimination:	
Please state how will you monitor the policy or project? Policy review (by staff/governors by dates on policy)	
Signed (Person completing the form): Michelle Clayton-Appleby 	Date: 21/2/24

