Galley Common Infant School
Computing Policy

Introduction

The use of computers is an integral part of the national curriculum and is a key skill for everyday life. As stated in the national curriculum computers have strong ties in 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. Computers, iPads and programmable robots are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Galley Common Infant School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Legal and Statutory Framework to use in connection with the policy

- National Curriculum in England: Computing (DfE, 2014)
- Keeping Children Safe in Education (KCSIE)
- DfE Teaching Online Safety in Schools (2019)
- Ofsted Education Inspection Framework (EIF, 2019)
- Equality Act 2010
- General Data Protection Regulation (GDPR)

Aims

• Provide a relevant, challenging and enjoyable curriculum of Computing for all pupils.
• Meet the requirements of the National Curriculum programmes 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 throughout their later life.
• To enhance learning in other areas of the curriculum using computing.
• To develop the understanding of how to use computers and technology in a safe and responsible way.

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

• Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
• 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.

Rationale

The school believes that the computing curriculum skills will:

- Give pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Objectives

Early Years

By the end of the Foundation Stage children should recognise that a range of technology is used in places such as homes and schools and they can select and use technology for particular purposes. Children will fluent in computer literacy and E-safety.

It is important in the Foundation Stage to give children a broad, play-based experience of Computers, iPads and other technologies in a range of contexts, including outdoor play. Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role play. Children develop listening skills, problem solving abilities and gain confidence through opportunities to use every day technology. Using an iPad, whiteboard or programmable toy develops curiosity, questioning and creativity. Everyday use of technology allows children to be familiar with equipment and vocabulary.

Children can explore technology that is 'unplugged' such as an old typewriter or mechanical toy. They should also be introduced to online safety in appropriate ways.

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 execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology 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.

Resources

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the National Curriculum and support the use of computing across the school. In school we ensure that:

• Every classroom has a desktop or laptop connected to the school network and an interactive Smart board .
• Each class has an allocated slot for the teaching of specific computing skills.
• iPads and laptops are available for use throughout the school day as part of Computing lessons and for cross curricular use.
• Each class has shared access to Beebots.
• Pupils may use Computing independently, in pairs, alongside a TA or in a group with a teacher.
• We have a link governor who takes a particular interest in ICT and computing in the school.

Planning

Computing modules will be planned in line with the National Curriculum and Education for a Connected World framework(2020) .They will allow for clear progression. We use PurpleMash schemes of work to fulfil all the national curriculum requirements to give the children a wide and experience curriculum.Modules will be designed to enable pupils to achieve stated objectives. Progress towards these objectives will be recorded by the class teacher during teaching of skills.

Assessment and Record Keeping (also see Assessment Policy).

The Computing lead regularly assesses capability through observations and looking at completed work, which is either saved on PurpleMash or in the pupils topic folders. Key objectives to be assessed are taken from the National Curriculum to assess key ICT and computing skills each term. Assessing Computing work is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of the computing curriculum. Assessment can be broken down into;

• Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.

• Summative assessment should review pupils' capability and provide a best fit level. Use of independent open ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work.

We assess the children's work in computing by making informal judgements as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit.

Monitoring and evaluation

The Computer lead is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations, book trawl

or looking at the data for the subject. The Computer lead is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

Pupils with special educational needs (see also SEN policy)

We believe that all children have the right to access the Computing curriculum. In order to ensure that children with special educational needs achieve to the best of their ability, it may be necessary to adapt the delivery of the Computing curriculum for some pupils. We teach Computing to all children, whatever their ability. Computing forms part of the National Curriculum to provide a broad and balanced education for all children. Through the teaching of Computing we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Where appropriate Computers and iPads can be used to support SEN children on a one to one basis where children receive additional support. Additionally, as part of our dyslexia friendly approach to teaching and learning we will use adapted resources wherever possible such as visual timetables, different coloured backgrounds and screen printouts.

Equal opportunities (see also equal opportunities policy)

Galley Common School will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to the computing curriculum and all staff members follow the equal opportunities policy.

Inclusion

At Galley Common we plan to provide for all pupils to achieve, including boys and girls, higher achieving pupils, those with SEN, pupils with disabilities, pupils from all social and cultural backgrounds, children who are in care and those subject to safeguarding, pupils from different ethnic groups and those from diverse linguistic backgrounds.

The role of the Computing Lead

- Responsible for producing an Computing policy across the school.
- To offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of Computing and Online Safety.
- To maintain resources and advise staff on the use of hardware and software.
- To monitor the children's Computer work, looking at samples of different abilities.
- To lead staff training on new initiatives.
- To attend appropriate training and keep staff up to date with relevant information and developments.
- To keep parents and governors informed on the implementation of the Computing curriculum and Online safety in the school.

Health and safety

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 Computer lead, who will arrange for repair or disposal.

Online Safety

• Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools AUP.
• Parents will be made aware of the 'acceptable use policy'.
• All pupils and parents will be aware of the school rules for responsible use of Computing and the internet and will understand the consequence of any misuse.
• The agreed rules for safe and responsible use of computers, equipment and the internet will be displayed in all classrooms.

This policy should be read in conjunction with our Online Safety Policy.

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