COTTESBROOKE INFANT & NURSERY SCHOOL

COMPUTING POLICY

GENERAL STATEMENT:

Computing and Information and Communication Technology (ICT) prepares children to participate in tomorrow's rapidly changing technologies. At Cottesbrooke Infant & Nursery School we give all children access to a wide range of high quality ICT equipment, including the use of computer hardware and software, video/DVD equipment, interactive whiteboards, projectors, recordable audio/visual devices, cameras, programmable toys, e-mail and the internet (see Acceptable Use Policy). We help children to develop the confidence and skills they need in order to be successful in this increasingly technological age. We also teach children to make sensible choices about the use of ICT in the development and presentation of their work across the curriculum.

AIMS:

At Cottesbrooke Infant & Nursery School we aim to provide a broad and balanced Computing curriculum through careful planning and delivery. Skills are integrated into lessons and also taught as discrete Computing lessons linked to the topic.

Computing at Cottesbrooke Infant & Nursery School offers opportunities for children to:

- Enjoy using ICT and tackle all applications with confidence and a sense of achievement and purpose.
- Develop ICT skills, including their knowledge and understanding of the importance of information and of how to select and prepare it.
- Learn new skills when using hardware and software to manipulate information in the process of problem solving, recording and expressing their work.
- Enhance their ability to apply their ICT capability to support their learning in all curriculum areas.
- Explore their attitudes towards Computing, its value for themselves, others and society, and their awareness of its advantages and limitations.

At Cottesbrooke Infant & Nursery School we aim to:

- Encourage children to confidently use their ICT skills to enhance their learning and raise standards.
- Have in place Schemes of Work that are designed and implemented to make the best of learning.
- Promote safe and sensible use of all ICT equipment. (See Acceptable Use Policy)
- Create an environment where all are staff are confident in using ICT, through continuing training and professional development,

EQUAL OPPORTUNITIES:

We aim to provide a balanced Computing curriculum at Cottesbrooke Infant & Nursery School and we ensure that all children irrespective of ability, gender, sexual orientation, gender identity, race, religion or belief have equal access to it. We understand that children originate from a variety of cultures and have a wide range of skills. Their work in general helps them to develop respect for the ability of other children and encourages them to collaborate and co-operate across a range of activities and experiences.

To ensure equal access to the curriculum for all the children, including children with special educational needs, differentiation should be planned. This is often achieved through task, support and/or expected outcomes. We hope that this approach encourages the children to develop a sense of achievement they may not experience in other areas of the curriculum. Children with advanced ICT skills should also have the opportunity to extend their skills.

Specific hardware and software is available to children with special educational needs. Work in Computing takes account of the targets set for children in their IEPs and often supports the delivery of these.

➢ Most Able Children (MAC):

If Computing is an area that a child is particularly gifted in, they should be challenged accordingly.

FUNDAMENTAL BRITISH VALUES & UNIVERSAL VIRTUES

Cottesbrooke Infant & Nursery School promotes the fundamental British values of democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with different faiths and beliefs. We also promote the universal virtues of courage, compassion, self-discipline, justice and humility. Where relevant, these values and virtues should form part of the teaching of computing.

Actively promoting these values and virtues means challenging opinions or behaviours in school that are contrary to fundamental British values.

It is not necessary for staff to 'promote' teachings, beliefs or opinions that conflict with their own, but it is unacceptable for staff to promote discrimination against people or groups on the basis of their belief, opinion or background.

PROGRAMME OF STUDY

ICT should be used across the curriculum and feature in other subject areas as far as possible. A variety of forms of Computing should be experienced and should include radio and television programmes, use of media players/recorders, consoles and remote controls as well as computers.

Computing in the Foundation Stage forms part of Understanding the World. Learning in Foundation Stage is topic based and cross-curricular, Computing is taught alongside other areas of learning. Children are given the opportunity to explore and use a wide variety of information and communication equipment including keyboards, digital cameras, tape recorders, mp3 recorders and programmable toys, along with specific computer programs. Children in reception also have their own log-on username, which allows their work to be saved and a shared Foundation Stage log-on. These skills then feed into teaching in year 1.

At Key Stage 1, to satisfy the National Curriculum statements of attainment for Computing, children should be able 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.

This should be achieved throughout the school in a progressive manner with children using increasingly more sophisticated software.

ORGANISATION OF TEACHING AND LEARNING:

> Planning:

Planning for Computing in the Foundation Stage is incorporated into the medium and short term planning. These form the basis for weekly plans.

The approach in Key Stage 1 is through dedicated units of work. Each year group studies 6 units, one each half term throughout the year. These are linked to fit in with the whole school topic plan. (*see appendix1*) Computing will be integrated into topic work.

The schemes of work, which are developed by the subject leader in collaboration with all members of staff, are taken from Rising Stars Switched On Computing for Key Stage One.
Medium term planning is stored in the class planning file and on the J drive of the school network. Links are made in the planning with other subjects.

Planning is monitored by the subject leader and head teacher to ensure progression and continuity of skills from Foundation Stage to Year 2.

All children are influenced by the work around them. Displays should reflect topics being taught during the term and celebrate achievement.

In KS1, each Computing topic is taught over a half term period. Each class has access to the netbooks and laptops for 1 hour per week, however, computers in the classrooms, shared areas and laptops can also be utilised. Children work individually, in pairs, groups or as a whole class. Where needed, teaching assistants and students will support children during activities.

➢ Resources:

All members of staff have responsibility to ensure the correct use of computer hardware and software. All staff must inform the subject leader or ICT technician of problems experienced with any equipment. The subject leader and ICT technician are responsible for ensuring the maintenance and repair of equipment through liaison with the technician. The Cottesbrooke Infant & Nursery School Helpdesk is available under staff resources on the school network for staff to log any technical difficulties. There is also a log book available in the school office for staff to leave enquiries about technical support and a laminated sheet is available in the staff room.

Hardware:

In Cottesbrooke Infant & Nursery School there is access to a wide range of hardware. An up-to-date list is available from the Computing subject leader.

Software:

There is access to software that allows a wide access to all types of program necessary to fulfil the requirements of the ICT schemes of work. These are noted in the schemes. There is also a range of software that can be used to enhance learning in all subjects. See subject leader for up-to-date list. The school system is accessed via a program called Launch Menu, rather than the traditional Windows desktop to make it easier for children to navigate.

All children (with the exception of Nursery) and staff at Cottesbrooke Infant & Nursery School have a log-on username which they use to gain access to the network. This enables work to be saved to their own folder.

➢ Copyright and licensing

• Staff may purchase software for their subject but need to ensure that they purchase the correct licences.

- Software can only be installed on the number of computers shown in the licence unless a site licence has been purchased.
- All licences will be kept by the Computing subject leader in a specific licence folder.
- Staff shall not copy or duplicate any school software for their own private use.
- All software loaded on school computer systems must have been agreed with the Computing subject leader and/or ICT technician.
- Personal software should not be loaded to school computers.

➢ Health and Safety

- The school will work to promote e-safety across the school, e.g. use of the Childnet International SMART rules and implements a comprehensive acceptable use of the Internet policy for pupils and staff. All pupils will be supervised when using the Internet.
- Rules are also on display for reference along with specific rules for the use of Internet and E-mail.
- Computer equipment is PAT tested within the agreed school schedule. However, if potentially dangerous faults are found, they should be reported immediately and the equipment should be withdrawn from use.
- Children should be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers.

ASSESSMENT RECORD AND REPORTING

- In Foundation Stage practitioners should monitor children's Computing development and record and report it against the EYFS outcomes.
- In Key Stage 1, teachers are required to complete an assessment grid at the end of each half term monitoring the children's progression of skills. This is done on the computer and can be found on the J drive under Computing assessment. The statements are best fit and children should be awarded a 1, 2, or 3 according to the statement.
- Some evidence of work from each class should be available to the subject leader at the end of each half term for monitoring, through Pupilshare, a shared network folder. This may include a description of the context and an explanation of how the pupils completed the task, photographs, discussion and saved work of differing pupils work.
- Computing work will be marked in line with the school policy on marking.
- A statement of the child's progress is written in the annual reports and can be discussed at parent's evenings.

REVIEW AND EVALUATION

The Switched On Computing documents have been utilised as an aid to developing the schemes of work for Computing. They have been amended and adapted to suit the needs of the school. Schemes of work are used as the basis for the year groups medium term plans. These plans are reviewed and updated from time to time by teachers in the year group. They are monitored by the Computing subject leader and help and guidance is given if necessary.

Amendments to the policy are made as necessary in consultation with other members of staff.

J O'Grady

June 2016

Appendix 1

Topic Grid for Foundation Stage and Key Stage 1

	Term 1		**Term 2**		**Term 3**	
Nursery/ Reception	- Using paint package - Using keyboard to write name and words - Operate music player - Use digital camera to take photographs - Talk about machines that we control. - Navigate computer programs					
Year 1	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Topic	Rising stars unit 2. "We Are TV chefs" - Filming the steps of a recipe	Rising stars unit 1. "We Are Treasure Hunters" - Using programmable toys	Rising stars unit 3. "We Are Painters"	Rising stars unit 4 "We Are Collectors" - Finding images using the web	Rising stars unit 5 "We Are Story Tellers" Illustrating a story- Little Red Riding Hood (stranger danger)	Rising stars unit 6 "We Are Celebrating" - Creating a card electronically- making an Eid card.
Computing Area	Computer Science: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	Computer Science: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content AND Digital Literacy: 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	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content AND Digital Literacy: Recognise common uses of information technology beyond school
Activities	Making sandwiches Writing and filming steps to make sandwiches.	Program a toy to move around a map to find buried treasure. Thinking of algorithms for their routes, Input algorithms	Create a piece of electronic artwork to illustrate a traditional tale, collated into an eBook.	Use web search engines to collect pictures of different types of animals and then explore ways in which those pictures can be organised.	Create a talking book that they can share with others.	Create a digital greetings card, which could be used for a religious festival or simply to say thank you or good luck.

Appendix 1 continued

Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Rising stars unit 1 "We Are Astronauts" Programming on screen	Rising stars Unit 2 "We Are Games Testers" Exploring how computer games work	Rising stars Unit 3 "We Are Photographers" Taking, selecting and editing digital images	Rising starts Unit 4 "We Are Researchers" Researching a topic	Rising Stars Unit 5 "We Are Detectives" Communicating clues	Rising stars Unit 6 "We Are Zoologists" Recording bug hunt data
Computing Area	Computer Science: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions AND Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content AND Digital Literacy: 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	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content AND Digital Literacy: 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	Computer Science: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions AND Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content AND Digital Literacy: Recognise common uses of information technology beyond school	Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content AND Digital Literacy: Recognise common uses of information technology beyond school
Activities	Program a sprite (such as a spaceship) to move around the screen.	Try to work out how some simple Scratch games work. Look at free online or open source games, share favourite games with the class.	Review photos online, practise using a digital camera, take photos to fit a given theme, edit photos, select best images to include in a shared portfolio.	Research a topic safely, effectively and efficiently. Use a structured approach (mind mapping). Share findings through a short multimedia presentation.	Solve a mystery by reading, sending and replying to emails. Listen to a witness statement. Use a fact file sheet to create a table and identify a culprit.	Go on a bug hunt, record and identify small animals. Organise data collected, record using a graphing package, interpret the graph to answer questions about the animals.