



Thornaby Church of England Primary School

Computing and ICT Policy

1. OUR VISION FOR ICT

Information and communication technology is increasingly becoming an essential part of everyday life. Therefore, at Thornaby Church of England School we will try to provide both staff and pupils with the most up-to-date hardware, software and training to ensure that our pupils have the BEST opportunities to develop their expertise in using ICT across the curriculum.

2. AIMS

The aims and purposes of teaching ICT at Key Stages 1 and 2, which underpin the National Curriculum programme of study are that ICT teaching should offer opportunities for children to:

- provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils;
- meet the requirements of the national curriculum programmes of study for ICT and computing;
- use ICT and 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 ICT and computing throughout their later life;
- to enhance learning in other areas of the curriculum using ICT and computing;
- to develop the understanding of how to use ICT and computing safely and responsibly;
- develop ICT capability, including their knowledge and understanding of the importance of information and of how to select and prepare it;
- explore their attitudes towards ICT, its value for themselves, others and society, and their awareness of its advantages and limitations;

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.

Rationale

The school believes that ICT and computing:

- Gives 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.

3. BUILDING ON CHILDREN'S EARLIER EXPERIENCES

These experiences are likely to have included:

- contact with, and discussion of, the technology in their everyday environment e.g. washing machines, televisions, videos, games consoles, hairdryers, remote control toys, traffic lights and cash registers;
- using toys that simulate real-life applications of ICT e.g. telephones and cameras and ICT-based toys and games e.g. keyboards that can save and play back tunes, sound-activated toys, robots and walking dolls;
- talking about computers that they have used, how they made them work, what they used them for, and how they knew that those tools were computers;
- developing eye and hand co-ordination using a mouse or joystick to move the pointer on the screen;

- knowing how to use the computer safely and sensibly e.g. not touching the plugs and switches.

The differing backgrounds children have in ICT capability offer a significant challenge to teachers. Children who have access to ICT outside school often have greater skills in handling hardware and software. However, they may not have the full range of ICT capability expected in the programme of study. By observing children's developing ICT capability, teachers will be able to ascertain what tasks and expectations would best support their learning.

4. OBJECTIVES

EYFS

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT 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 the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

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

- that programs execute by following a sequence of instructions
- to write and test simple programs;
- to use logical reasoning to predict and computing the behaviour of simple programs organise, store, manipulate and retrieve data in a range of digital formats;
- to communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught:

- to design and write programs that accomplish specific goals, including controlling or simulating physical systems;
- to solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs;
- to work with variables and various forms of input and output;
- to generate appropriate inputs and predicted outputs to test programs use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs understand computer networks including the internet; how they can provide multiple;
- about services, such as the world-wide web; and the opportunities they offer for communication and collaboration;
- to describe how internet search engines find and store data; use search engines effectively;
- to be discerning in evaluating digital content;
- to respect individuals and intellectual property; use technology responsibly, securely and safely
- to select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

5. PLANNING AND PROGRESSION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN THE CURRICULUM

Thornaby Church of England School are using a 2 year rolling programme. Planning is complete in consultation with the National Curriculum Learning Objectives.

Following the National Curriculum Learning Objectives will ensure that children use ICT in a wide range of situations so that they learn how and when to use ICT appropriately. Children will be given the opportunity to discuss the advantages and disadvantages of information and communication technology for different purposes, both in school and beyond. This will allow them to make judgements in the appropriate uses of ICT. Progression should be indicated by moving from using ICT as a direct tool in the completion of a task to the critical view of the ways that ICT can be used in a wider context. The children will then be able to

decide on the most suitable situation for the use of ICT and will be able to develop a sustained individual project.

6. ASSESSMENT AND RECORD KEEPING

Assessment will be carried out towards the end of each unit in the ICT Scheme of Work, using an appropriate cross-curricular activity in which pupils can demonstrate their ICT capability. Assessment activities should be open ended (where possible) allowing pupils to make decisions about how and when to use ICT.

Clear record keeping will help to inform future planning and ensure continuity of experience and learning between years, key stages and schools. Teachers will assess children's computing skills against a range of objectives appropriate for the year group and highlight off the objectives the children can independently complete. These assessment sheets will then be passed onto their next teacher to continue to assess against.

7. TEACHING AND LEARNING STRATEGIES FOR ICT

The teaching of ICT within the classroom situation can be approached in a number of different ways:

- Individual teaching - to include one to one teaching
- Whole-class and half-class teaching for demonstration, support teaching and exposition
- Group work - organised by comparable ability, mixed ability, friendship or randomly. The groups can be pairs, threes and up to a maximum of five depending on the program being used. Group work allows intervention by teaching staff, as well as the very effective use of cascade learning.

Effective teaching, regardless of the organisation to be used in the classroom, requires a wide range of techniques to be utilised by the teaching staff. These include explaining, instructing, questioning, observing, assessing, diagnosing and providing feedback.

8. EQUAL OPPORTUNITIES AND ICT

The planned use of ICT in the curriculum will enable all children to benefit from participation. There will be no barriers to access or opportunity based on race, sex, religion, ethnic group, culture or ability. Working towards equality of opportunity requires that teachers will treat all children as individuals with their own abilities, difficulties and attitudes. The staff will aim to create an environment in which, from the earliest age, children and their teachers learn to respect and value each other. It is important that all children are given opportunities to work in groups, as well as an individual situation, and that groupings be organised with consideration being given to the educational needs of the children. It is also important to emphasise the children are more important than the activity in which they are engaged. Information and communication technology, as with all parts of the curriculum, is child-centred.

9. SPECIAL EDUCATIONAL NEEDS AND ICT

As with all children full access will be given to the use of ICT in the curriculum in accordance with statutory requirements and the schools Special Needs Policy.

In the case of children with special needs the computer can aid communication, as it does not necessarily rely on the spoken word. ICT can allow children with special needs to explore a variety of tasks before they are even able to manipulate a pencil or read. Careful use of ICT will allow all children to progress in areas in which they would probably have otherwise experienced frustration. More able and talented children can use the computer to extend their abilities so that the final product is dependent upon their personal understanding of the use of ICT. The efficient use of ICT can help develop physical intellectual, emotional and social skills for children of all abilities, and used carefully can have a particularly profound effect on children with special educational needs.

The fact that ICT encourages children to accept responsibility for their own learning, and due to its versatility, it can provide clear opportunities for differentiation. Differentiation can be achieved as follows:

- by task - same topic, differing tasks and strategies.

- by outcome - the same topic as others, but their work indicates different levels of achievement.
- by progression - a series of small structured tasks with increasing difficulty and decision-making skills.

The majority of programs within the school are 'content - free' thus allowing children to explore at their own level of attainment. The use of word banks within some programs are ideal aids for Special Educational Needs children. Classroom organisation, curriculum planning and the use of resources will take account of the requirements of Special Educational Needs children.

10. STAFF ROLES IN THE DEVELOPMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

The role of the Headteacher

- To ensure the National Curriculum is implemented.
- To be a promoter and facilitator of ICT within the school.
- To encourage and support a co-ordinated approach to ICT development, thus ensuring staff will use ICT confidently.
- To make available the necessary resources to continue the development of ICT within the school.
- To support the ICT co-ordinator in matters relating to the use and development of ICT across the curriculum.
- To recruit ICT literate staff when the opportunity arises.
- To work to achieve equal opportunities in the use of ICT throughout the school.

The role of the ICT Subject Leader

- To promote ICT within the school.
- To ensure that ICT is implemented effectively within the classroom to the National Curriculum requirements.
- To act as a support and catalyst for change.
- To manage the school computer network.
- To work with colleagues in the provision of support and guidance in all matters related to ICT.
- To arrange for relevant in-service training for the staff in accordance with the Staff Development Policy.
- To organise and review ICT resources and their relevance and usage.

- To ensure supplies of consumables are maintained.
- To help maintain the computers, using external agencies when necessary.
- To review and introduce new software programs and hardware as the needs arise.
- To provide a good example of the use of ICT within the classroom.
- To encourage parental involvement in ICT.
- To maintain contact with SICTU and to know where to obtain further advice in matters relating to ICT in the curriculum.
- To ensure there is equality of opportunity in the use of ICT.

The role of Teaching Staff

- To ensure that ICT is used effectively in the classroom to the requirements of the National Curriculum.
- With the support of the Headteacher and ICT subject leader, to implement highlighted and discussed changes in the use of ICT.
- To ensure that there is equality of opportunity in the use of ICT in the classroom.
- To maintain the good condition of ICT equipment within the classroom and inform the ICT subject leader of any problems that may arise.

11. THE ROLE OF THE GOVERNORS IN THE DEVELOPMENT OF ICT.

Through consultation with the Headteacher and the ICT subject leader the governors will need to have a full understanding of the implications of the extensive and changing uses of ICT in the curriculum and society. This will enable them to give the school their fullest support in all matters related to the implementation of ICT in the school.

12. THE USE OF THE INTERNET IN THE SCHOOL

All members of the school will implement the school's Acceptable Use Policy (AUP) to ensure appropriate use of the Internet. This will:

- Allow all users to access and use the Internet for educational purposes.
- This can include: e-mail and World Wide Web facilities.
The school activities can cover: individual research /preparation of lessons/project work/homework assignments /communicating with other teachers and students.

- Provide a mechanism by which staff and students are protected from sites, information, and individuals which would undermine the principles and aims of the school.
- Provide rules which are consistent, and in agreement with the Data Protection Act.
- Provide rules which are consistent with the acceptable procedures commonly used on the Internet, including those associated with netiquette.

13. HEALTH AND SAFETY AND ICT

The following are considerations that will be made when delivering ICT to children in the classroom in addition to those laid down in the school's Health and Safety Policy.

The equipment

- The hardware needs to be placed on trolleys in a secure manner to ensure that should it be moved the equipment would not fall off.
- The trolley needs to be an appropriate height, 600mm is recommended for primary schools.
- The monitor needs to be angled for comfortable viewing.
- Children will be provided with comfortable seating that is set at eye level with the screen to avoid neck strain.
- The children will be seated far enough away from the screen to avoid eye strain.
- Brightness and contrast settings will be at a comfortable setting to avoid eyestrain.
- Windows with direct sunlight will have blinds fitted.
- Cables will be secured to ensure the safety of the operator.

The children

- Children will be taught the correct procedure for setting up and closing down the hardware.
- They will have regular breaks from the computer to avoid eyestrain.
- No food or drink will be taken near the computer.

14. PARENTAL INVOLVEMENT IN ICT

Parents are encouraged to use the school learning platform to find out what their children are studying.

Relevant websites, curriculum programs and games are available on the learning platform so that parents can help their children at home

15. STAFF DEVELOPMENT IN ICT

Staff will be encouraged to embrace new technologies and to attend relevant training opportunities. The ICT subject leader will be available to support staff whenever necessary.

16. REVIEW OF THE INFORMATION AND COMMUNICATION TECHNOLOGY POLICY

Revised October 2010

To be reviewed October 2012

Reviewed October 2012

To be reviewed October 2014

Reviewed October 2014

To be reviewed October 2016

Reviewed October 2015

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Reviewed October 2016

To be reviewed October 2018

Reviewed October 2018

To be reviewed October 2020