

DHEKELIA PRIMARY SCHOOL

COMPUTING

POLICY

Introduction

The use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. We recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world.

Rationale

The school believes that IT, computer science and digital literacy:

- Are essential life skills necessary to fully participate in the modern digital world.
- Allows children to become creators of digital content rather than simply consumers of it.
- Provides access to a rich and varied source of information and content.
- Communicates and presents information in new ways, which helps pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Offers opportunities for communication and collaboration through group working both inside and outside of school.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Aims

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for computing at Key Stage 1 and 2
- To respond to new developments in technology.
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing.
- To develop the understanding of how to use computers and digital tools 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.

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Objectives

Early years

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play.

Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly beneficial for children who have English as an additional language.

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 a sequence of instructions.
- ✓ Write and test simple programs.
- ✓ Use logical reasoning to predict and computing the behaviour of simple programs.
- ✓ Organise, store, manipulate and retrieve data in a range of digital formats.
- ✓ Communicate safely and respectfully online, keeping personal information private, and 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.

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; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; 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 services, such as the world-wide web; and the opportunities they offer for communication and collaboration.
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- 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.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behavior; identify a range of ways to report concerns about content and contact.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform 'ICT Helpdesk' of any faults as soon as they are noticed so they can be rectified. Resources are located throughout the school and within the ICT suite. 'ICT Helpdesk' will update and add new hardware/software to the network. Computing network infrastructure and equipment has been sited so that:

Planning

The school will be using 'Rising Stars' scheme of work. It fully meets the objectives of the National Curriculum for Computing and allows for clear progression in computing. It has been used successfully within other SCE schools. Staff will use both the long and short term planning to support their teaching and they will have access to further guidance and support online through 'rising stars' if they require it. Teachers must take into account the requirements of individuals (whatever level they are working at) and plan to support these children as necessary to enable them to participate wholly and effectively in the curriculum.

Assessment and record keeping

Assessing computing is an integral part of teaching & learning and key to good practice. Teachers regularly assess progress through observations and evidence of work. Key objectives to be assessed are taken from the National Curriculum to assess computing, this is supported through the scheme of work. This is then moderated with other SCE schools across Cyprus.

Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities.

- Summative assessment should review pupils' ability and provide a best fit 'level'. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the unit of 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. This supports an end of year assessment judgement.

The children's work is saved on the school network. Some work may be printed and used for display. Teachers are also required to keep three evidence folders to keep samples of the children's work across the range of abilities.

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching.

Inclusion

We will ensure that all children are provided with the same learning opportunities whatever their social class, gender, culture, race, disability or learning difficulties. All pupils have equal access to computing and provision for individual needs will be made by teachers.

The role of the Subject Leader

There is a computing subject leader who is responsible for the implementation of computing policy across the school. Their role is to:

- Offer help and support to all members of staff including teaching assistants.
- Provide colleagues opportunities to observe good practice in the teaching of computing.
- Monitor the teaching and learning in computing.
- Manage the computing budget.
- Keep up-to-date with new technological developments and communicate information and developments with colleagues
- Lead staff training on new initiatives.
- Keep parents and governors informed on the implementation of computing in the school.
- Help staff to use the given resources to allow individuals to reach their full potential.

Health and safety

The school is aware of the health and safety issues involved in children's use of IT and computing.

- All fixed electrical items within the school are tested annually under contract by CSP.
- All portable electrical equipment is tested by our site manager annually.
- Computer server is tested annually by BFC HQ J6 Communications

Furthermore:

- Children should not put plugs into sockets or switch the sockets on.
- Liquids must not be taken near the computers.
- Damaged equipment should be reported to 'ICT Helpdesk' so that it can be fixed or disposed of.
- e-safety guidelines will be set out in the e-safety policy & Acceptable Use Policy

Security

We take security very seriously. As such:

- 🔒 The computing technician will be responsible for regularly updating anti-virus software.
- 🔒 The 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' at school entry.
- 🔒 All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.
- 🔒 The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all computing areas.

Cross curricular links

We are aware that ICT and computing skills should be further developed through application within other subjects. ICT and computing should also be used to support and inspire learning in other subjects.

Parental involvement

Parents are encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home for pleasure and through home-learning tasks. Parents will be made aware of issues surrounding e-safety and encouraged to promote this further at home.