



**St Joseph's Catholic Primary School,  
Hednesford**

**Computing Policy**

Adopted by Governors: 13<sup>th</sup> May 2015  
Reviewed July 2018  
Next due for review - July 2021

## Computing Policy

### 1. Introduction

1.1 The 2014 national curriculum introduces a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity. It gives schools the chance to review and enhance current approaches in order to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

1.2 Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

1.3 The Acceptable Use of ICT Policy and the E Safety Policies should also be read in conjunction with this policy.

### 2. The Nature of Computing

2.1 The new National Curriculum presents the subject as one lens through which pupils can understand the world. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media. The introduction makes clear the three aspects of the computing curriculum: **computer science (CS)**, **information technology (IT)** and **digital literacy (DL)**.

2.2 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. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate- able to use, and express themselves and develop their ideas through, information and communication technology - at a level suitable for the future workplace and as active participants in a digital world.

### 3. Entitlement:-

The New National Curriculum states that pupils should be taught to:

#### 4. Resources

Our school is currently making use of the Fantastict Ltd resources to support the

	Key Stage 1	Key Stage 2
Computer Science	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web</p> <p>Appreciate how [search] results are selected and ranked</p>
Information Technology	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Use search technologies effectively</p> <p>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>
Digital Literacy	<p>Recognise common uses of information technology beyond school</p> <p>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</p>	<p>Understand the opportunities [networks] offer for communication and collaboration</p> <p>Be discerning in evaluating digital content</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>

delivery of the computing curriculum. Attainment targets are available in appendix 1

#### 5. Review

This policy will be reviewed in light of any changes to the computing curriculum, change in resources and further updates to safeguarding information.

This policy should be read in conjunction with the SEND policy, public sector equality duty policy, safeguarding policy and curriculum policies

## Attainment targets Key Stage 1

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

	Learning to be Computer Scientists	Learning to be creative	Learning to be e-safe
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.			

## Attainment targets Key Stage 2

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Pupils should be taught to:	Learning to be Computer Scientists	Learning to be Creative	Learning to be e-safe
design, write and debug 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			
use logical reasoning to explain how some simple algorithms work 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			
use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content			
select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information			
use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.			