



COMPUTING OVERVIEW POLICY

Date of Policy: July 2021

To be reviewed: Annually

This policy should be read in conjunction with other relevant school policies: Teaching and learning policy and Assessment and Recording Policy and Communication policy.

OVERVIEW

We will provide a high-quality computing education that equips pupils to use computational thinking, to be able to access computers and programs as well as being aware of how to use the Internet safely. Strong links will be made across the curriculum however; the core of computing will be computer science, in which pupils will be taught the principles of information and computation, and allowing them to interact with the systems and programs on the computer. We will teach them how to navigate various programs on the computer and how to fundamentally try and stay safe whilst using them.

AIMS – Intent

Our vision, our values and our rights underpin all of our policies and the education we deliver. Article 3 of the United Nations Convention on the Rights of the Child states that: “The best interests of the child must be a top priority in all decisions that affect children”. This policy has been created to keep the children at Delamere School safe and happy.

1. Pupils may have periods when they appear alert and ready to focus their attention on events, objects or parts of objects [for example, attending briefly to lights, sounds or patterns of movement]
2. Pupils perform actions, often by trial and improvement, and they remember learned responses over short periods of time [for example, pressing a switch repeatedly to turn on a light or sound source]
3. Pupils cooperate with shared exploration and supported participation [for example, working with an adult or a peer to operate a touch screen].
4. Pupils apply potential solutions systematically to problems [for example, pressing a switch repeatedly after the power source has been turned off].
5. Pupils use computer programs, for example, to move a device to manipulate something on screen. They make connections between control devices and information on screen [for example, pressing a specific graphic on a touch screen].
6. Pupils use Information and Communications Technology (ICT) to interact with other pupils and adults [for example, touching the screen to respond to another’s action in an on- screen game].
7. Pupils gather information from different sources. They use ICT to communicate meaning and express ideas in a variety of contexts
8. Pupils use computing to communicate and present their ideas
9. Pupils build on their computing knowledge and understanding so that pupils are equipped to use information technology to navigate programs on the computer, have an understanding of internet safety and to explore various systems, programs and a range of content.

10. To enable pupils to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
11. To ensure that pupils are responsible, competent, confident and creative users of information and communication technology.
12. To ensure 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 them.
13. To ensure that pupils are introduced to the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.

STRATEGIES - Implementation

1. Pupils will be introduced to algorithms and if they reach national curriculum level, they will begin to understand and describe a range of algorithms
2. Pupils should be taught to sequence events leading up to them being able to create simple programs in and design and write programs that accomplish specific goals.
3. When creating simple programs, children will be exposed to some errors in the programming, allowing them to see and put in practice sequences allowing them to work
4. Pupils will be taught how to use switches as well as being able to navigate the computer or electronic device allowing them to understand and find what they are searching for.
5. Pupils will be taught how to recognise common uses of information technology beyond school 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
6. They will learn how to use sequence, selection, and repetition in programs; work with variables and various forms of input and output
7. They will be taught how to use search technologies effectively and safely, appreciate how results are selected and ranked, and be discerning in evaluating digital content
8. They will learn how to select, use and combine a variety of software (including internet services) on a range of digital devices allowing them to collect, and begin to analyse, evaluate and present data and information

In the EYFS:

Computing will be encompassed through a cross-curricular approach. Children will have the opportunity to explore different forms of technology, including the interactive white board, iPads, switches, cause and effect toys and every day appliances. Children may use technology to aid their communication development. The children in EYFS will access the sensory room in school on a weekly basis in order to develop their cause and effect skills.

Impact

- All pupils will have the opportunity to experience a range of computing based learning experiences in a wide range of settings.
- All pupils will have the and develop a range of computing skills and knowledge in line with their overall ability.

- In the EYFS:
- All pupils will be encouraged to develop cause and effect skills in relation to technology.
- All pupils will explore how things work

EVIDENCE for Learning is collated through;

- Bsquared Assessment software
- Evisense
- Class Floor books and / or class topic books
- End of Year reports
- Evidence linked to NACCE award